DOCUMENT RESUME

ED 245 808 PS 014 365

AUTHOR	Hayes, A.; And Others
TITLE	Special Preschools: Monitoring a Pilot Project. Volume I: Project Report.
INSTITUTION	Queensland Univ., Brisbane (Australia). Fred and Eleanor Schonell Educational Research Centre.
SPONS AGENCY	Queensland Dept. of Education, Brisbane (Australia).
PUB DATE	Aug 81
NOTE	186p.; For related document, see ED 236 822.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC08 Plus Postage.
DESCRIPTORS	*Disabilities; Downs Syndrome; Family Characteristics; Foreign Countries; Formative Evaluation; Handicap Identification; Kindergarten; Mainstreaming; Physical Examinations; Pilot Projects; *Preschool Children; Preschool Education; Program Descriptions; Program Design; *Program Development; Psychomotor Skills; *Services; *Special Education; Student Placement; Teacher Role
IDENTIFIERS	*Australia (Queensland); Program Monitoring

ABSTRACT

A project was developed for the purpose of monitoring the special education program of the Queensland, Australia, Department of Education. This program offered educational support for very young handicapped children and their families. The monitoring team had a formative role in providing the services of consultants to advise teachers in certain areas of program development and a research role in documenting the development of four specific preschool programs over the 2-year pilot period. Questionnaires, interviews, observations, written submissions, workshops, seminars, consultations, and formal assessments were employed. Central attention was paid to the children, their families, the staff most closely associated with children and families, and the program that was developed to meet existing needs. Attention was also directed toward examinations of the roles of guidance officers, school medical officers, other professionals, teachers in regular preschools and kindergartens, and, finally, other organizations and agencies. Discussion of the data begins with a description of the contexts of early educational intervention and then progresses to an overview of the four programs, the support services available to them, and programs beyond those undertaken in the special preschools. The final chapter summarizes key issues and makes specific recommendations for future program development. (RH)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED245808

SPECIAL PRESCHOOLS:

MONITORING A PILOT PROJECT

by

A. Hayes, M. Steinberg, E. Cooksley,

A. Jobling, D. Best and A. Coulston

Volume I

PROJECT REPORT

August, 1981

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Alan Hayes

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PS 014365

FRED AND ELEANOR SCHONELL EDUCATIONAL RESEARCH CENTRE

DEPARTMENT OF EDUCATION
UNIVERSITY OF QUEENSLAND

SPECIAL PRESCHOOLS:
MONITORING A PILOT PROJECT

by

A. Hayes, M. Steinberg, E. Cooksley,
A. Jobling, D. Best and A. Coulston

Fred and Eleanor Schonell Educational Research Centre
University of Queensland

Volume I

PROJECT REPORT

August, 1981

PS 014365

Foreword

This publication is one of a trilogy of reports which together represent a series of interrelated research programs on early intervention with young handicapped children undertaken by the Fred and Eleanor Schonell Educational Research Centre. The three reports are:

Watts, B.H., Elkins, J., Conrad, L., Andrews, R.J., Apelt, W.C., Hayes, A., Calder, J., Coulston, A.J., Willis, M., 1981 : *Early Intervention Programs for Young Handicapped Children in Australia, 1979-1980.*

Elkins, J., Calder, J., Conrad, L., Shepherd, J., Coulston, A., Willis, M., 1980 : *Toy Libraries in Australia : A Report with Special Attention to Their Role in Services for Young Handicapped Children and Their Families.*

Hayes, A., Steinberg, M., Cooksley, E., Jobling, A., Best, D., Coulston, A., 1981 : *Special Preschools : Monitoring a Pilot Project.*

The first two studies were commissioned by the Office of Child Care of the Department of Social Security. The third was undertaken at the request of the Queensland Department of Education and funded by the Office of Child Care.

It is the hope of the staff of the Fred and Eleanor Schonell Educational Research Centre that these studies will aid the development of further insights into the nature and needs of young children with disabilities and their families and the ways in which account must be taken of the complex ecologies within which early intervention programs grow and develop.

B.H. Watts
Professor of Special Education and Director
Fred and Eleanor Schonell Educational Research Centre

Acknowledgements

Monitoring the development of special preschools in Queensland has been possible only as a result of the cooperation of several groups involved with the pilot programs. The study would not have been possible without the generous support of the Office of Child Care, Department of Social Security, and the valued advice of the Director of the Office of Child Care, Mrs. Marie Coleman and members of her staff, particularly Dr. Stewart Towndrow.

The project was conducted in close collaboration with the Division of Special Education, Queensland Department of Education. Several staff members of that Department assisted the project team in innumerable ways: providing access to facilities and resources and generally facilitating the passage of our project to its completion. We are deeply indebted to the Director of Special Education, Mr. Gerald Ashby, and Mr. Noel Culbert, Staff Inspector, Division of Special Education, for their encouragement, support and facilitation of the project in ways that made the task at hand achievable, and at the same time enjoyable. The support and co-operation of several other members of the Department of Education must also be acknowledged. We are most grateful for the help and advice freely given by: Mr. Ken Robertson, Mr. John Tainton, Mr. Sid Parry, Mr. Geoffrey Swan, Mr. Sid Cliffe, Mr. Geoff Simpson and Mrs. Pat Hubner.

The collection of much of the data to be reported would not have been possible without the unfailing cooperation of the teachers at the four special preschools. Our thanks are extended to: Narelle Arcidiacono, Margaret Campbell, Barbara Fogett, Myrna Freed, Sue Gilbert, Margaret Girle, Lisa Healy, Jennifer Jordan, Eileen Rigdon, Lynne Waters, Lyle Williams and Barbara Yule.

The Guidance Officers involved with the four pilot programs also contributed invaluably to the data collection and we wish to acknowledge the assistance of: David Bassett, Beulah Castan, Monica Cuskelly, Lyndall Hulme, Toni Johnson and Keith Watson. The co-operation of the teachers' aides and special preschool advisors at the four units was also appreciated.

Members of the Department of Health also assisted the project in a diversity of very valuable ways. The cooperation of the Central Assessment Clinic staff in providing assessment information was of great assistance to the project. The time spent in discussion and consultation with Ms. Robyn Shepherd, Mrs. Johanne Wright and Mr. Geoff Ross of the Division of Intellectual Handicap Services proved most valuable. The collaboration was enriched by the close involvement of members of the Division of School Health Services. Our thanks are extended to the Director, Dr. Val O'Hara, and the School Medical Officers, Dr. Ruth Fitzharding, Dr. Julie Hudson, Dr. Kim Murphy and Dr. Judy Wagner. Staff of the Department of Childrens' Services also assisted in data collection and the efforts of Mrs. Frances Adkins are particularly acknowledged.

We would also like to express our appreciation of the cooperation of staff from university departments, professional associations, hospitals, and the many other agencies concerned with the well-being and development of young handicapped children, who attended and contributed valuably to the many meetings convened by project staff.

In innumerable ways Professor Betty Watts supported, encouraged, advised and facilitated the project. Her wealth of experience and insight enriched the project from its inception to its completion. The final report is all the richer for her contribution.

To Mrs. Jennifer Bramley, Mrs. Naomi Hardy, Mrs. Sannie Pritchard and Mr. Danny Sheehy belongs the credit for the production and aesthetic merit of the report. Mrs. Bramley laboured unerringly to decipher the almost indecipherable, to produce order from at times chaotic drafts and we are especially grateful for her good humoured approach to tasks that were at times quite trying.

Our final thanks must go to another group of people, far too extensive to be named in full, but without whose cooperation this project could not have been completed. These are the families which collaborated in the project, from whom we learned so much about the realities of handicap and their needs for the services of early intervention programs.

To all those who have assisted with this project we can simply say thanks.

Alan Hayes
on behalf of the project team.

TABLE OF CONTENTS

Foreword iii

Acknowledgements v

CHAPTER 1 AN OVERVIEW OF THE MONITORING PROJECT

1.1 Early Intervention in the Queensland Context 1

1.1.1 A brief historical overview 1

1.1.2 The key elements of early educational intervention 1

1.2 The Collaborative Monitoring Project 3

1.2.1 The involvement of the Fred and Eleanor Schonell Educational Research Centre 3

1.2.2 Monitoring rather than evaluating 4

1.2.3 Research methods 4

CHAPTER 2 THE CONTEXTS OF PILOT EARLY EDUCATIONAL INTERVENTION PROGRAMS: LOCATIONS, CLIENTS AND INFORMATION BASE

2.1 Contextual Features in Overview 9

2.2 The Location and Catchment Areas of the Special Preschools 9

2.3 Family Characteristics 10

2.3.1 The teacher questionnaire study 10

2.3.2 Family configuration, characteristics, occupations and income levels 10

2.3.3 Transport availability and utilization 15

2.4 Family Contact with the Special Preschool Unit 17

2.5 Characteristics of the Children Attending the Special Preschools 21

2.5.1 Age, sex and attendance patterns 21

2.5.2 Primary disabilities 25

2.6 Physiotherapy Assessment 25

2.6.1 The neuro-sensory-motor assessment 25

2.6.2 Significant neurological signs 31

2.6.3 Oculo-motor functioning 32

2.6.4 Primitive reflexes 32

2.6.5 Orientation and postural responses 33

2.6.6 Tactile responses 34

2.6.7 Proprioceptive functioning 34

2.6.8 Vestibular responses to gravity 35

2.6.9 Vestibular responses to angular deceleration 35

2.6.10 The assessment of motor skills 36

Chapter 2 (continued)

2.7 The Home Visit Study 38

2.7.1 Sample selection 38

2.7.2 Parents' coding of primary disability 39

2.7.3 Developmental history 40

2.7.4 The home environment 40

2.7.5 Physiotherapy assessments 41

2.7.6 Comparison of Down syndrome and non-Down syndrome groups 41

2.7.7 Comparisons of currently enrolled and previously enrolled groups 41

2.8 Availability of Assessment Information 41

2.8.1 Assessment data base 44

2.8.2 Frequency and pattern of assessment 49

2.8.3 Comparison of pattern of assessment by the Central Assessment Clinic and the Division of Guidance and Special Education 49

2.8.4 Formal assessment instruments and procedures 49

2.8.5 Reassessment 52

2.8.6 Teacher comments on assessment 52

2.9 Conclusion 52

CHAPTER 3 PROGRAM DEVELOPMENT: PROCESSES AND PRODUCTS

3.1 A General Discussion of Factors Influencing the Design of Early Educational Intervention Programs 57

3.1.1 The Education Department information statement 59

3.1.2 Teachers' background and philosophy of the teaching and learning process 60

3.1.3 Individual handicapping condition and assessment data available 60

3.1.4 Impact of responsibilities additional to program implementation 61

3.1.5 Adequacy of communication networks with other professionals and agencies 61

3.1.6 Availability of teaching equipment and materials 61

3.2 The General Model Developed for Program Records: A Review of Teacher Comments 61

3.2.1 Education Department information statement 61

3.2.2 Teacher's philosophy of the teaching/learning process 64

Chapter 3 (continued)

3.2.3 Individual handicapping condition and assessment data 65

3.2.4 Extra responsibility placed on teachers 66

3.2.5 Communication networks with other professionals and agencies 66

3.2.6 Availability of teaching equipment and materials 67

3.3 Description of 1980 Programs, from Four Brisbane Early Educational Intervention Units 68

3.3.1 Aims and objectives of programs 68

3.3.2 Principal program components or procedures 85

3.4 Concluding Summary 97

CHAPTER 4 SUPPORT SERVICES

4.1 Data Collection 103

4.2 Guidance Officers 103

4.2.1 The multi-faceted role of the guidance officer 104

4.2.2 Comparative allocation of guidance officer time 104

4.2.3 The guidance officers' service viewed by its consumers 106

4.3 Medical Officers 106

4.3.1 Division of School Health Services 106

4.3.2 Salaried or sessional specialists and medical officers 109

4.3.3 Private practitioners 109

4.3.4 The consumer view of the medical services 113

4.4 Speech Therapy 113

4.4.1 Involvement 113

4.4.2 Role 114

4.4.3 Consumer view 115

4.5 Physiotherapy 115

4.5.1 Involvement 117

4.5.2 Role 117

4.5.3 Consumer view 118

Chapter 4 (continued)

4.6 Occupational Therapy 118
  4.6.1 Involvement 118
  4.6.2 Role 118
  4.6.3 Consumer view 119
4.7 Social Work 119
  4.7.1 Involvement 119
  4.7.2 Role 119
  4.7.3 Consumer view 120
4.8 Summary of Support Professionals' Views 120
4.9 Consultancy Role of the Fred and Eleanor Schonell Educational Research Centre 122
4.10 Other Agencies 122
  4.10.1 Involvement 122
  4.10.2 Method of contact with other agencies 124
  4.10.3 Consumer view of other agencies 124
4.11 Parent Support Groups 125
4.12 Conclusions 125

CHAPTER 5 BEYOND THE SPECIAL PRESCHOOL

5.1 Integration in Regular Settings and Flexibility of Placement 127
  5.1.1 The rationale for integration: teacher and parent perceptions 127
  5.1.2 Parental concern about integration 128
5.2 Regular Preschool and Kindergarten 128
  5.2.1 The pattern of regular preschool integration 128
  5.2.2 Teacher perceptions of regular preschool integration 128
  5.2.3 The role of the special preschool adviser in regular preschool integration 128
5.3 Placement Beyond Early Intervention 130
  5.3.1 Patterns of movement 130
  5.3.2 Regular preschool and kindergarten placement 130
  5.3.3 State primary school placement 134
  5.3.4 Perceptions of regular placements 134
5.4 Parental Perceptions of their Children's Futures 134
5.5 Conclusion 135

CHAPTER 6 ISSUES AND RECOMMENDATIONS 141

6.1 Contextual Issues 143

6.1.1 Family characteristics and access 143

6.1.2 The characteristics of the children requiring early educational intervention programs 145

6.1.3 Assessment, record keeping and information exchange 146

6.2 Program Development 150

6.2.1 Teacher philosophies and roles 150

6.2.2 Program development and implementation 153

6.2.3 Parents and programming 155

6.3 Support Services 156

6.3.1 The availability, training and functions of support personnel: guidance officers, school medical officers, paediatricians, speech therapists, occupational therapists, physiotherapists and social workers 156

6.3.2 Team approaches to the delivery of support services 159

6.4 Programs Beyond the Special Preschools 162

6.4.1 Integration 162

6.4.2 The special preschools as clearinghouses 164

6.5 General Directions for the Future Development of Early Educational Intervention Programs 165

6.5.1 Coordination 167

6.5.2 Beyond the first pilot phase 167

References 171

TABLES

1.1 Data Collection Program 5 - 7

2.1 Number of children in family (including the child in the unit) 13

2.2 Family income levels 13

2.3 Occupation of primary income earner 14

2.4 Frequencies of broad occupational categories for the primary income earners of each of the special preschool units 14

2.5 Educational level of parents of children attending the four special preschool units 15

2.6 Availability and utilization of transport modes by parents with children attending special preschool units 16

TABLES (cont'd)

2.7	Distance travelled to attend the special preschool units	17
2.8	The main way the parent found the program	18
2.9	Frequency of communication with program's staff	19
2.10	Parental arrangements to talk to teachers	20
2.11	Number of parents who need or needed more opportunities to talk to staff	21
2.12	Number of parents who had or have the opportunity to be involved with the program	21
2.13	Age and sex of children attending the four special preschool units as at March 1981	22
2.14	Types of program offered by the four special preschools with numbers of children involved with each type (as at March 1981 classified by sex and by age)	23
2.15	Parental reports of frequency of children's sessions at unit	24
2.16	Parental reports of frequency of home visits by special preschool staff	26
2.17	Primary disability	27
2.18	Frequency of disabling conditions reported on assessment files	28
2.19	Intellectual development deficits (relative to chronological age) for children who had been formally assessed	29
2.20	Language development deficits (relative to chronological age) for children who had been formally assessed	30
2.21	The presence of significant neurological signs in special preschool children	32
2.22	Oculo-motor function in special preschool children	32
2.23	The presence of primitive and/or pathological reflexes in special preschool children	33
2.24	Orientation and postural responses in special preschool children	33
2.25	Tactile functioning in special preschool children	34
2.26	Proprioceptive functioning in special preschool children	34
2.27	Vestibular (primarily utricle and saccule) responses in special preschool children	35
2.28	Vestibular (particularly semicircular canal) responses in special preschool children	35
2.29	Distribution of raw scores on selected items from the evaluation of the motor skills of the special preschool children	37
2.30	Numbers of families selected from each unit for inclusion in the Home Visit Study with total numbers of families during the period of the study	39
2.31	Age of child in current placement (as at March, 1981)	40
2.32	Assessment data on the children and families home visited, for Down syndrome and non-Down syndrome classifications	42

TABLES (cont'd)

2.33 Assessment data on the children and families home visited, for those children currently enrolled at March 1981, and those previously enrolled 43
2.34 Total numbers of children and assessment interviews for these children 44
2.35 Number of interviews (by all agencies) for each child in each of the four special preschool units 45
2.36 Area of interview 46 - 47
2.37 Interviewing agencies 48
2.38 Number of children interviewed by Central Assessment Clinic staff for each child in each of the four special preschool units 50
2.39 Number of children interviewed by Guidance & Special Education staff for each child in each of the four special preschool units 51
2.40 Types and frequency of tests or inventories used in formal interviews 53 - 54
2.41 Year of interviews 55
2.42 Number of children with two or more interviews in the same area for all children interviewed across the total monitoring period 56
2.43 Children who have been assessed twice or more with the same test or inventory (total group) 56
3.1 1980 Weekly timetables and long term objectives set for groups, for four Early Education Intervention Units 69 - 71
3.2 Sections from program formats for specific instructional objectives 72 - 73
3.3 Examples of product/process emphases in goal statements 79 - 82
3.4 Examples of objectives expressed in terms of expected changes in program procedures and adult roles 83 - 84
3.5 Assessment instruments/techniques used for initial student assessment 85 - 86
3.6 Reasons for undertaking three forms of assessment 87
3.7 Components of programs from four Brisbane Early Educational Intervention Units for 1980 - March 1981 89
3.8 Helpfulness of program for the child 98
3.9 Changes in child's behaviour at home since program 99
3.10 Changes in the child that the parents have noticed 100
3.11 Ways in which the program has helped the parents 101
4.1 Comparative allocation of guidance officer time to early intervention and to other duties (10 min. intervals in two working weeks) 104
4.2 Comparative allocation of guidance officer time in early intervention by function (10 min. intervals during two working weeks) 105
4.3 Parental arrangements to talk to guidance officers 107
4.4 Parental arrangements to talk to school medical officer 110

TABLES (cont'd)

4.5 Unmet needs as perceived by parents 111
4.6 Parents' greatest worries about their children 112
4.7 Outside services: parents' reports of other programs delivering particular services to children (currently enrolled 1981) 113
4.8 Outside services: parents' reports of frequency of service (currently enrolled 1981) 114
4.9 Outside services: parents' assessment of services (currently enrolled 1981) 115
4.10 Parental arrangements to talk to therapists 116
4.11 Summary of the perceived roles of professional support personnel as indicated in professional submissions 121
4.12 Other programs concurrently attended by children enrolled in the special preschools 123
4.13 Relative distribution across agencies of the currently enrolled children also attending other programs 124
5.1 Preschool, creche and kindergarten integration 129
5.2 Placements from 1979 to March 1981 131
5.3 Regular placements 132 - 133
5.4 Expected primary school placement 136
5.5 Parents' views of the future placement of their children 137
5.6 Parents' views of the future for their children 138
5.7 Parents' greatest worries about their children 139

FIGURES

2.1 Geographical location of families with children attending the four units in 1979-80 11
2.2 Geographical location of families with children attending the four units in 1980-81 12
3.1 Factors influencing the design of Early Educational Intervention Programs 58
3.2 Outside activity area for one Special Preschool Unit 91
3.3 Examples of floor plans of Special Preschools 92
3.4 Inside activity areas for one Special Preschool Unit 93
3.5 Major sources of structuring in program development 94 - 95

CHAPTER 1

AN OVERVIEW OF THE MONITORING PROJECT

1.1 Early Intervention in the Queensland Context

1.1.1 A brief historical overview. Early intervention programs are emergent, evolving entities. Their emergence at this time and their evolution reflect changes in the wider context of service delivery to the handicapped in Queensland. From the first moves into the provision of preschool services for deaf in the early 1950's, Queenslanders have seen the development of a range of specialist early intervention services, particularly since 1970. These services have tended to cater for children with a particular handicapping condition, such as hearing or visual impairment, cerebral palsy, autism and moderate to severe intellectual handicap. The population of chidren "at risk" for developmental difficulties includes, however, many children with less easily identified and classifiable conditions.

All children who require special educational and therapeutic interventions, in principle, should have access to these services. The early intervention services that had evolved by 1978 in Queensland clearly could not provide services for many of the children who needed them, and recent government initiatives have been directed to filling some of these gaps in service delivery.

The Queensland Department of Education became involved in the development of a more general system of early educational intervention in 1978, when it was decided to accept responsibility for the education of a group of predominantly Down syndrome children who had been receiving early intervention services at the W.R. Black Handicapped Children's Home. The children were transferred to a room at the Baroona Special School, and the following year, 1979, the program moved to a special preschool unit adjoining the Kenmore South State School. At the same time, programs commenced at the Acacia Ridge, Aspley and Mt. Gravatt West Special Preschools.

1.1.2 The key elements of early educational intervention. In 1979 the Division of Special Education released an information statement on early educational intervention (Ashby, Cliffe, Culbert and Miller, 1979). This was intended to be a working document, in the sense that it sketched the broad elements of the philosophy and guidelines for the development of early educational intervention.

The information statement espoused four key principles:

- *Provision of planned education from the earliest possible age.*

  The younger the age at which children with physical, intellectual, emotional or sensory deficits are identified and fully assessed, the better the chances of minimizing the effects of the handicap on the child's subsequent education and development. Early intervention with the child can also minimize the development of socio-emotional problems associated with the handicap which may arise between parents and child.

- *Close involvement of parents and family in the education process.*

  Successful educational programs for very young handicapped children require the combined efforts of teachers, specialists and the total family, but in particular the parents. The family, particularly the mother, should retain the major responsibility for the education of handicapped infants and toddlers; and activities should be incorporated into the daily routine and handling of the child which promote development in specific areas of deficit. Continued parent involvement throughout the preschool and school years is necessary for the optimal development of the individual. Similarly a close match between teaching in the home and that in the preschool or school situation is vital.

- *Keeping a wide range of educational options open for the child.*

  Premature labelling often works against the best interests of the child. Early educational intervention should be available to all handicapped children regardless of the cause of the developmental dysfunction. Educational programs and experiences should be specially tailored to the child's individual needs, progress must be continually monitored and future placement options kept open. Expectations for the child's future are best when based on performance, not on preconceived notions concerning the future effects of particular handicapping conditions.

- *Maximizing the opportunity of the child to experience a wide range of behaviour models.*

  As far as possible both formal and informal opportunities should be provided for the handicapped child and his family to interact with other children, especially non-handicapped children, in normal situations.

These guidelines were intentionally broad to enable early intervention to evolve, not as a response to Departmental dictate, but as a reflection of the patterns of needs of the clientele and the services available to provide for these needs. The teachers and other professionals associated with the program were given the scope to formulate the program at each special preschool in a climate of minimal departmental direction. The task of the monitoring team was to document these developments over a two year period.

1.2 The Collaborative Monitoring Project

1.2.1 The involvement of the Fred and Eleanor Schonell Educational Research Centre. Staff of the Fred and Eleanor Schonell Educational Research Centre, University of Queensland, became involved with the early educational intervention programs in 1978 when informal discussions were held on the need to evaluate the pilot program at the Baroona Special School.

Parental pressure soon led to the expansion of the pilot project to include the three additional centres referred to above, and early in 1979 plans were developed for a collaborative monitoring involving the Division of Special Education of the Queensland Department of Education and the Fred and Eleanor Schonell Educational Research Centre. The Commonwealth Department of Social Security's Office of Child Care provided research funds enabling the monitoring project to be undertaken.

The aim of the monitoring project was :

> *To monitor and evaluate the Queensland Department of Education, Division of Special Education program to offer educational support for very young handicapped children and the families of such children from the age of first identification through to five or six years of age.*

The monitoring team's involvement with the pilot programs took two forms. First, the team had a formative role, in providing the services of consultants to advise the teachers in certain areas of program development. Two of the consultants were physiotherapists with extensive experience of service delivery in educational settings; the third had a background, again extensive, in human movement studies and the disabled.

The second form of involvement took the form of a research role, documenting the development of the four programs over the two year pilot period. The consultants, therefore, played a dual role, being involved both as consultants and researchers.

1.2.2 Monitoring rather than evaluating. The word "evaluation" was avoided assiduously from the outset. The project was to be a monitoring, not an "evaluation" in the summative sense of measuring program outcomes. This decision was taken for a number of reasons. First, the developing nature of the pilot early educational intervention programs made it difficult to set up a research design, using a treatment and control group approach. Second, even if this had been possible, there was little possibility of assessing, a priori, the extent to which factors outside of the programs influenced the children's development during the pilot period. Third, before such an evaluation could take place, there would need to be detailed descriptive data base, identifying the context, key elements of the programming approach and the network of support services available to the program: that is, generally identifying the range of relevant variables. Fourth, the word "evaluation" engendered considerable anxiety among the teachers who mistakenly felt that they were the targets of the "evaluation". The words "monitoring" and "documenting" seemed less emotive and more accurately described the nature of the research approach.

1.2.3 Research methods. From the outset it was recognized that, first, a variety of research methods would be required and, second, the sharpness of research focus would be greater for some aspects of the programs than for others. Central attention was paid to the children, their families, the program staff most closely associated with them, and the program developed to meet their needs. Attention became increasingly diffuse in examining the roles and functions of guidance officers, school medical officers, other professionals, teachers in regular preschools and kindergartens and finally, other organizations and agencies.

Table 1.1 details the research methods used in each year of the project for each group involved with early educational intervention.(1)

---

(1) Examples of all the instruments used in the study are provided in Appendix 4.

Table 1.1

Data Collection Program

Group	Method Used	1979	1980	1981
1. Special preschool teachers	Fact sheet			
	Interviews	✓		✓ April
	Meetings	✓ August		✓ March, ✓ April, ✓ May
	Questionnaire	✓ Facts on children in unit		✓ March, ✓ April, ✓ May, ✓ June
	Submitted programs		✓	
	Workshop		✓ February	
2. Parents	Questionnaires	✓		✓ April
	Meetings	✓ September-October		
3. Guidance Officers	Meetings	✓ July		✓ February, ✓ March, ✓ May, ✓ June
	Written submissions		1. Backgrounds 2. Time budgets	1. Contact with agencies 2. Roles 3. Time budgets 4. Assessment details
	Letters of request			
	Workshop		February	

Table 1.1 (continued)

Group	Method Used	1979	1980	1981
4. School Medical Officers	Meetings	✓ May (initial) ✓ October	✓ April	✓ May
	Questionnaires			✓ May-June
	Written submissions			✓ June
	Interviews			✓ June
5. Professionals involved with special preschools, physiotherapists, occupational therapists, Child Health, Speech Therapy, Social Work, Physical Education	Meetings		✓ May (Physiotherapists) ✓ November (Physiotherapists)	✓ April, ✓ June
	Questionnaires			✓ April
	Written submissions			✓ June
	Interviews			
	Workshop		✓ February	
6. Teachers in regular preschools and kindergartens	Meetings			✓ June
	Questionnaires			✓ June (to those who had received children from the units)
	Workshop		✓ February	

Table 1.1 (continued)

Group	Method Used	1979	1980	1981
7. Other organizations:				
- Central Assessment Clinic	Interviews and Letters of Request		✓	✓ March, ✓ June
- Q.S.N.C.W.A.				
- Department of Children's Services	Interviews		✓	✓ June
- Autistic Children's Welfare Association	Interviews			✓ June
- Spina Bifida Association				
- Multiple Handicapped Association				
- C.H.I.L.D.	Workshop		✓ February	
8. Fred and Eleanor Schonell Educational Research Centre	Observations	✓	✓	✓
	Site Visit Data forms	✓		
Research Staff:	Early Education Interaction Report Forms	✓		
	Portage			
Margaret Steinberg Enid Cooksley Jean Calder Dianne Best	Neuro-Sensory-Motor Assessments		✓	
	Motor Assessments		✓	
	Interviews with mothers - includes medical and developmental history		✓	
	Home Visit Inventory		✓	
	Workshop		✓ February	

Questionnaires, interviews, observations, written submissions, workshops, seminars, consultations and formal assessments were used by the monitoring team, to describe the rich melange of features of the pilot early educational intervention programs, as they rapidly evolved.

The many meetings with parents and professionals provided important opportunities not only for data collection but for facilitation of discussion. The monitoring team acted as a catalyst for discussion of issues of both principle and practice. Rather than survey the scene from a distance, the consultants very quickly became active participants in it, establishing close working relationships with program staff.

The close involvement of the monitoring team members enabled them to become aware of many of the day to day difficulties encountered within the programs and to perceive some of the more subtle features of their operation. The data to be reported blend statistical facts and figures with qualitative information on the opinions, philosophies and perceptions of those in contact with the special preschools. Discussion of the data starts with a description of the contexts of early educational intervention (Chapter 2) and then moves to a description of the programs (Chapter 3), the support services available to them (Chapter 4) and the programs beyond the special preschool attended by children (Chapter 5). The final chapter (Chapter 6) summarizes key issues and makes specific recommendations for the future development of this exciting addition to the Queensland educational scene.

CHAPTER 2

THE CONTEXTS OF PILOT EARLY EDUCATIONAL INTERVENTION PROGRAMS : LOCATIONS, CLIENTS AND INFORMATION BASE

2.1 Contextual Features in Overview

The first stage in the process of monitoring the development of the Pilot Early Educational Intervention Program involved informal visits to the four units by several of the members of the research team. The physiotherapy and human movement studies consultants used the visits to establish contact with program staff, parents and the children. The visits provided an opportunity for them to define their consultant roles to the teachers and parents and to form first impressions of the units and their clientele. Meetings were also held with the teachers and with parents, at which the Project Co-ordinator explained the purposes of the study and described the aspects of the involvement of the Fred and Eleanor Schonell Educational Research Centre. These meetings provided further opportunities for project staff to become familiar with some of the major similarities and differences between the units, their staff and their clientele.

It quickly became apparent that the units differed in important ways. Major differences were evident in such general contextual variables as the location and accessibility of the units, the range of family characteristics, the types and degrees of exceptional development manifested by the children, and the amount and nature of assessment information available on individual children.

Such differences combined to constitute a distinctly different context for early educational intervention in each of the four units. The needs of exceptional children in an area with a high incidence of families experiencing economic and social disadvantage, for example, may be quite different from the needs of children living in more affluent circumstances. Similiarly, the extent to which the family has the personal and material resources and the desire to be involved in the educational program may differ from area to area. Clearly, a number of salient personal and social variables may interact complexly to determine the nature of the programs developed within a particular unit and the pattern of early educational intervention service delivery.

2.2 The Location and Catchment Area of the Special Preschools

The four special preschools were located in the grounds of regular preschools at which a unit was available for use by the Pilot Early Educational Intervention Program. Two units were in the south east of the Brisbane metropolitan area, at Acacia Ridge and Mt. Gravatt West. A further unit was located at Kenmore South in the western suburbs, while the fourth unit was at Aspley in the northern suburbs. Figures 2.1 and 2.2 show the geographical location of the families whose children attended the four units in 1979-80 and 1980-81. As can be seen, each of the units enrolled children from a widely dispersed set of suburbs. The patterns of transportation available to the families at units are discussed in detailed below (see 2.3.3).

2.3 Family Characteristics

2.3.1 The teacher questionnaire study. Information was received from teachers via a questionnaire about the family background of children currently enrolled (in March 1981) in the units. This questionnaire specifically covered the areas of family configuration and characteristics, income levels, parental occupation and educational levels and issues relating to the transportation of the children to the special preschool units.

The teachers completed the questionnaires using a combination of information from their records and interviews with the parents. Data were provided for eighty seven families with children attending the special preschool units throughout March 1981. (A copy of the questionnaire is reproduced in Appendix 4).

2.3.2 Family configuration, characteristics, occupations and income levels. The families with children attending the special preschool units shared the following features: first, almost all (97%) of the mothers of the children in the units were the biological parents, this being the case with only 87% of the fathers. (The exceptions included one grandmother, one foster mother, one step-father, and three fathers who were lone parents). Second, the majority of the families (66% overall) had either one or two children, with only 11% of the families having four or more children (see Table 2.1). This pattern applied across the four units.

The pattern of family income levels, however, showed some significant differences among the four units (see Table 2.2). At unit 1, over half the families had incomes of less than \$5,000, while at unit 4 no family had an income of less than \$5,000 and only three families had incomes of less than \$9,000. A chi square test for independent samples, using a cross tabulation by income level (greater than \$9,000 or less than \$9,000) and unit (with adjustment to remove one of the cells with a frequency of less than 5) confirmed the significant differences between units ($\chi^2 = 19.95$, d.f. = 3, $p < .001$).

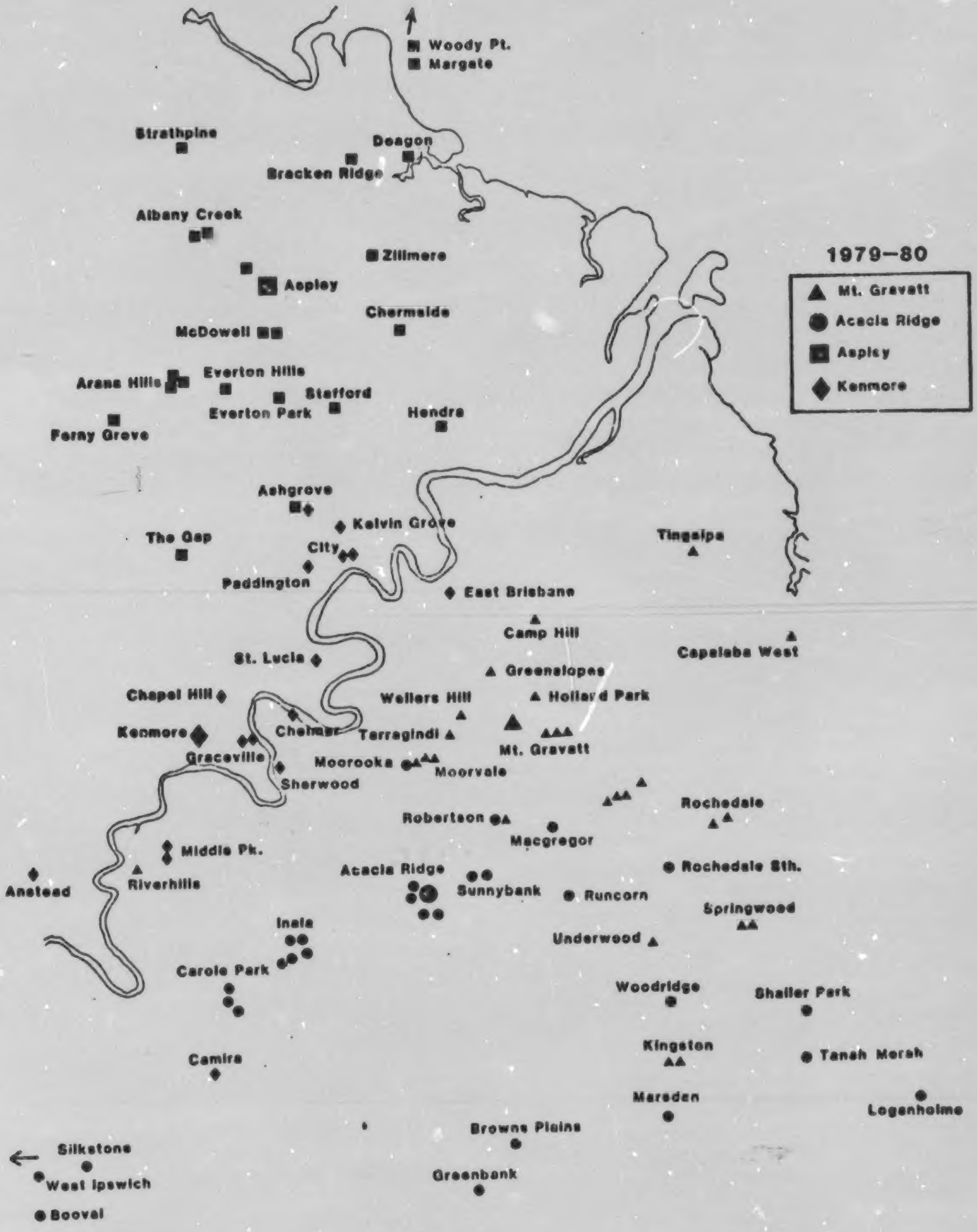

Figure 2.1

Geographical location of families with children attending the four units in 1979-80

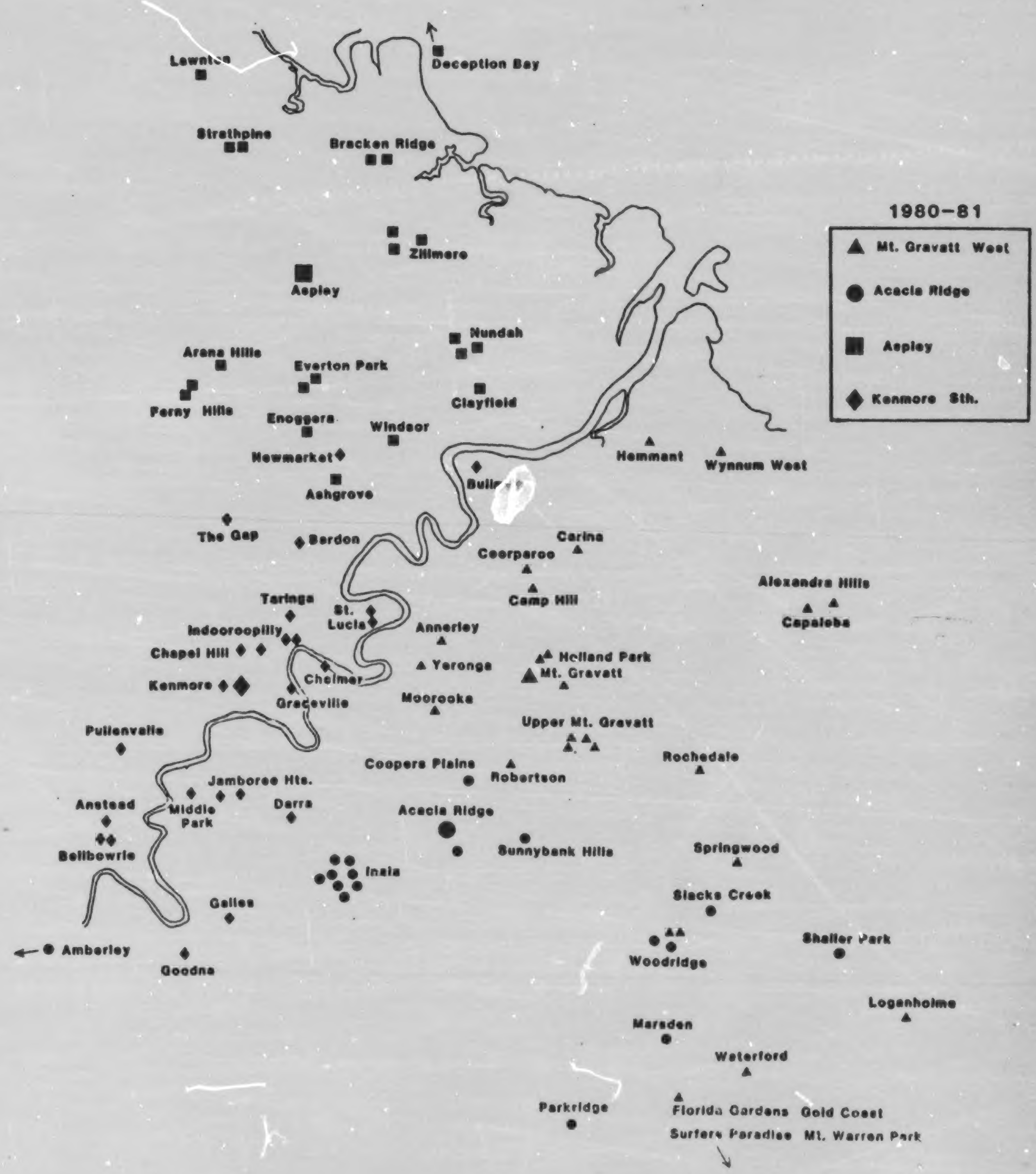

Figure 2.2

Geographical location of families with children attending the four units in 1980-81

Table 2.1

Number of children in family (including the child in the unit)

	Unit									
	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
1 (the child in the unit)	3	17	5	26	3	14	6	21	17	20
2	10	56	9	47	11	50	10	36	40	46
3	1	6	4	21	5	23	10	36	20	46
4	3	17	1	5	3	14	1	4	8	9
5	0	-	0	-	0	-	1	4	1	1
6	1	6	0	-	0	-	0	-	1	1
Total	18		19		22		28		87	

Table 2.2

Family income levels

	Unit									
Income	1		2		3		4		Total	
level	N	%	N	%	N	%	N	%	N	%
Less than $5,000	10	56	3	16	1	5	0	-	14	16
$5,000-$9,000	3	17	3	16	1	5	3	11	10	12
Over $9,000	5	28	13	68	20	91	25	89	63	72
Total	18		19		22		28		87	

Post hoc comparisons showed no significant differences among the family income levels for units 2, 3 and 4. However, significant differences were obtained between the frequencies for unit 1 and those for unit 2 ($\chi = 9.68$, d.f. = 1, $p<.001$).

As would be expected, the differences in patterns of family income across the four units were also reflected in the patterns of occupations of the primary income earners in the families (Table 2.3). Unit 1 had the highest number of parents who were pensioners, unemployed, or unskilled workers (Table 2.4). A chi square test for independent samples again confirmed the significant differences among the units ($\chi^2 = 8.46$, d.f. = 3, $p<.05$).

Table 2.3

Occupation of primary income earner

	Unit									
	1		2		3		4		Total	
Occupation	N	%	N	%	N	%	N	%	N	%
Professional	0	-	3	16	8	36	2	7	13	15
Technical	4	22	3	16	1	5	4	14	12	14
Administrative	1	6	6	32	4	18	6	21	17	20
Skilled	2	11	1	5	5	23	8	29	16	18
Unskilled	2	11	2	11	2	9	4	14	10	12
Pension	6	33	3	16	0	-	2	7	11	13
Unemployment benefit	2	11	1	5	1	5	0	-	4	5
Self-employed	1	6	0	-	1	5	2	7	4	5
Total	18		19		22		28		87	

Table 2.4

Frequencies of broad occupational categories for the primary income earners of each of the special preschool units

	Unit			
	1	2	3	4
Professional, technical, administrative, skilled, self-employed	8	13	19	22
Unskilled, pension, unemployed	10	6	3	6

Examination of the data on educational levels of parents of children attending the special preschools provided further evidence of the heterogeneity of the families across the four units (Table 2.5).

Table 2.5

Educational level of parents of children attending the four special preschool units

	Unit							
Educational	1		2		3		4	
level	N	%	N	%	N	%	N	%
Primary/special school	17	47	5	13	3	7	2	4
Secondary	14	39	25	66	27	61	43	77
Tertiary	5	14	8	21	14	32	11	19

The highest number of parents with only a primary level of education was at unit 1, the lowest at unit 4, with unit 3 having the most parents with a tertiary education. As for the income and occupational data, a chi square test for independent samples produced a significant result ($\chi^2 = 37.32$, d.f. = 6, $p<.001$).

2.3.3 Transport availability and utilization. Given the wide catchment areas for each of the units discussed above, it was important to examine the transport arrangements of families attending these units. The teachers were asked to collect information on a number of aspects concerning the availability and utilization of transport modes and the distances travelled. Table 2.6 details information on the availability of transport.

It was clear that both the availability and utilization of public transport were uniformly low across the four units. Unit 1 had the lowest level of ownership of private transport, the lowest percentage of parents licensed to drive and, not surprisingly, given the family income data, the highest utilization of subsidized taxi transport.

Two children used public transport; both travelled by bus, one because no subsidized taxi service was available, and the other because the family car was not always available. Two children were transported to the unit by a teacher, and one child by the mother of another child attending the unit.

Table 2.6

Availability and utilization of transport modes by parents with children attending special preschool units

	Unit									
	1		2		3		4		Total	
	N	%*	N	%	N	%	N	%	N	%*
* of children enrolled	n=18		n=19		n=22		n=28		n=87	
Availability of public/private transport										
Number for whom public transport to unit was readily available	5	28	0	-	1	5	8	27	14	16
Number with private vehicles	12	72	16	84	22	100	28	100	78	90
Number whose fathers held licence	12	67	15	79	22	100	26	93	75	86
Number whose mothers held licence	12	67	15	79	21	96	25	89	67	77
Use of public/private transport										
Number who used private transport	18	100	19	100	22	100	28	100	87	100
Number who used public transport	0	-	2	11	0	-	0	-	2	2
Use of taxis (as mode of private transport)										
Number whose families used taxis	11	61	1	5	2	9	0	-	14	16
Number whose taxis were subsidized	10	56	0	-	1	5	0	-	11	13

The majority of families travelled less than 10 km to their child's unit although, at unit 1, five families (28%) travelled a distance of 20 km or more to reach the unit, and 6 families (21%) were in a similar position in attending unit 4 (Table 2.7).

Table 2.7

Distance travelled to attend the special preschool units

	Unit									
	1		2		3		4		Total	
Distance	N	%	N	%	N	%	N	%	N	%
Less than 5 km	1	6	5	26	6	27	6	21	18	21
5 - 10 km	11	61	13	68	7	32	7	25	38	44
10 - 15 km	0	-	0	-	6	27	4	14	10	12
15 - 20 km	1	6	0	-	2	9	5	18	8	9
20 km and over	5	28	1	5	1	5	6	21	13	15
Total	18		19		22		28		87	

2.4 Family Contact with the Special Preschool Unit

Data for this section were derived from the questionnaires completed by parents with children attending the units in 1979 and 1981 (see Appendix 4). In both years, the predominant source of information used by parents in making initial contact with the program was provided by a therapist, doctor, teacher or other professional. (Table 2.8). Slightly more families heard about the program from publicity sources in the 1979 sample than in the 1981 group. This was to be expected as the programs were more widely publicised at their commencement in 1979 than in 1981. Even so, the numbers of families reaching the programs as a result of publicity campaigns was relatively small in both years.

The majority of parents in both years had contact with program staff at least weekly, a pattern which applied across all four units (Table 2.9). In both years most of the contact with the teachers was informally arranged (Table 2.10). A desire to have more opportunities to talk with program staff was expressed by almost a third of the parents (Table 2.11).

Table 2.8

The main way the parent found the program

	Unit									
Information source	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Enrolled (1979)										
A friend or relative	2	*13*	3	*19*	1	*5*	3	*15*	9	*13*
A therapist, doctor, teacher or other professional	12	*80*	10	*63*	16	*80*	13	*65*	51	*72*
Publicity	1	*7*	2	*13*	3	*15*	3	*15*	9	*13*
Other ways	0	-	1	*6*	0	-	1	*5*	2	*3*
Total	15		16		20		20		71	
Previously Enrolled (1981)										
A friend or relative	0	-	1	*8*	2	*25*	4	*25*	7	*15*
A therapist, doctor, teacher or other professional	7	*78*	11	*85*	6	*75*	10	*63*	34	*74*
Publicity	2	*22*	1	*8*	0	-	2	*13*	5	*11*
Total	9		13		8		16		46	
Currently Enrolled (1981)										
A friend or relative	0	-	5	*45*	4	*24*	2	*13*	11	*20*
A therapist, doctor, teacher or other professional	11	*92*	4	*36*	12	*71*	11	*73*	38	*69*
Publicity	0	-	1	*9*	1	*6*	2	*13*	4	*7*
Other ways	1	*8*	1	*9*	0	-	0	-	2	*4*
Total	12		11		17		15		55	

Table 2.9

Frequency of communication with program's staff

	Unit									
Frequency of communication	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
					Enrolled (1979)					
More than once a week	5	*33*	1	*6*	4	*20*	9	*45*	19	*27*
Weekly	6	*40*	9	*56*	5	*25*	5	*25*	25	*35*
Fortnightly	3	*20*	0	-	2	*10*	3	*15*	8	*11*
Monthly	0	-	4	*25*	4	*20*	1	*5*	9	*13*
Less than once a month	1	*7*	2	*13*	5	*25*	2	*10*	10	*14*
Total	15		16		20		20		71	
					Previously Enrolled (1981)					
More than once a week	4	*44*	2	*15*	4	*50*	5	*33*	15	*33*
Weekly	3	*33*	8	*62*	2	*25*	8	*53*	21	*47*
Fortnightly	0	-	1	*8*	1	*13*	0	-	2	*4*
Monthly	0	-	1	*8*	1	*13*	1	*7*	3	*7*
Less than once a month	2	*22*	1	*8*	0	-	1	*7*	4	*9*
Total	9		13		8		15		45	
					Currently Enrolled (1981)(1)					
More than once a week	3	*25*	2	*18*	4	*25*	6	*40*	15	*28*
Weekly	3	*25*	8	*73*	10	*63*	6	*40*	27	*50*
Fortnightly	2	*17*	1	*9*	1	*6*	0	-	4	*7*
Monthly	4	*33*	0	-	0	-	1	*7*	5	*9*
Less than once a month	0	-	0	-	1	*6*	2	*13*	3	*6*
Total	12		11		16		15		54	

(1) One observation is missing

Table 2.10

Parental arrangements to talk to teachers

	Unit									
Arrangement	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
				Enrolled (1979)						
Informal	14	*93*	16	*100*	16	*80*	16	*80*	62	*87*
Appointment	1	*7*	0	-	4	*20*	2	*10*	7	*10*
No contact	0	-	0	-	0	-	2	*10*	2	*3*
Total	15		16		20		20		71	
				Previously Enrolled (1981)						
Informal	8	*89*	12	*92*	8	*100*	15	*100*	43	*96*
Appointment	1	*11*	0	-	0	-	0	-	1	*2*
No contact	0	-	1	*8*	0	-	0	-	1	*2*
Total	9		13		8		15		45	
				Currently Enrolled (1981)						
Informal	9	*75*	11	*100*	17	*100*	14	*93*	51	*93*
Appointment	3	*25*	0	-	0	-	0	-	3	*6*
No contact	0	-	0	-	0	-	1	*7*	1	*2*
Total	12		11		17		15		55	

Table 2.11

Number of parents who need or needed more opportunities to talk to staff

	Unit									
	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Enrolled (1979)										
	3	*20*	3	*19*	10	*50*	5	*25*	21	*29*
Previously Enrolled (1981)										
	3	*33*	2	*15*	3	*43*	5	*33*	13	*30*
Currently Enrolled (1981)										
	5	*42*	1	*9*	5	*31*	4	*27*	15	*27*

Table 2.12

Number of parents who had or have the opportunity to be involved with the program

Previously Enrolled (1981)										
	7	*78*	12	*92*	7	*88*	12	*80*	38	*84*
Currently Enrolled (1981)										
	11	*92*	11	*100*	15	*88*	11	*73*	48	*87*

2.5 Characteristics of the Children Attending the Special Preschools

2.5.1 Age, sex and attendance patterns. Of the children attending the units as at March 1981, 69% were boys and the majority (73%) of children were aged 3 years or older (Table 2.13). Only 22 (23%) were less than 3 years of age and of these four were less than 2 years of age, and only 2 were less than a year old.

Table 2.13

Age and sex of the children attending the four special preschool units as at March 1981

	Unit				
Classification	1	2	3	4	Total (%)
Sex of children attending					
Female	7	4	10	9	30 (31%)
Male	11	16	19	20	66 (69%)
Age (in months) of children attending					
0 - 11	0	0	1	1	2 (2%)
12 - 23	1	0	2	1	4 (4%)
24 - 35	3	5	6	2	16 (17%)
36 - 47	3	4	5	11	23 (24%)
48 - 59	6	8	6	2	22 (23%)
60 - 71	5	3	9	12	29 (30%)

The children were served by a variety of three program types: home based, unit based, and integrated home and unit based programs. A home based program is one implemented by parents and/or professionals within the child's own home, while a unit based program is one implemented within the special preschool; an integrated home and unit based program delivers program services to the child both within his home and at the special preschool unit.

The program types emphasized by each special unit varied (Table 2.14). Unit 1 ran both unit based and integrated programs, unit 2 had home based and integrated programs, while units 3 and 4 had home based and unit based programs. The majority of children (67 or 70%) were receiving a unit based program. Very few children (7%) received a solely home based program. The remainder (23%) received an integrated home and unit based program at units 2, 3 and 4.(1)

---

(1) While approximately 70% of children were not receiving any home based programming, the teachers in each unit indicated that they tried to visit each child's home for the purpose of observation of the child in the home setting and to provide a basic parent support service.

From Table 2.14, it is evident that there was no clear patterning of program types (home based, unit based or integrated) according to the age of the child, despite the initial principle expressed by the Department of Education that younger children would tend to receive their programs within the home.

Table 2.14

Types of program offered by the four special preschools with numbers of children involved with each type (as at March 1981 classified by sex and by age)

	Unit														
Classification	1			2			3			4			Total		
	H	C	I	H	C	I	H	C	I	H	C	I	H	C	I
Boys	-	10	1	2	-	14	-	19	-	2	18	-	4	47	15
Girls	-	4	3	-	-	4	2	8	-	1	8	-	3	20	7
Total	-	14	4	2	-	18	2	27	-	3	26	-	7	67	22
Age of children (in months)															
0 - 11	-	-	-	-	-	-	-	1	-	1	-	-	1	1	-
12 - 23	-	-	1	-	-	-	-	2	-	-	1	-	-	3	1
24 - 35	-	-	3	2	-	3	2	4	-	2	-	-	6	4	6
36 - 47	-	3	-	-	-	4	-	5	-	-	11	-	-	19	4
48 - 59	-	6	-	-	-	8	-	6	-	-	2	-	-	14	8
60 - 71	-	5	-	-	-	3	-	9	-	-	12	-	-	26	3
Total	-	14	4	2	-	18	2	27	-	3	26	-	7	67	22

For those children in unit based or integrated programs, the majority enrolled in 1979 (76%) attended the special preschool for two or three sessions a week (Table 2.15). In units 1, 3 and 4 most children attended twice a week (60%, 65% and 71% respectively). At unit 2, attendance three times per week was most commonly the pattern in 1979. The 1981 data show a much more varied pattern of attendance for each unit, although two sessions per week is again the modal figure (Table 2.15). The number of children attending for three sessions at unit 2 had decreased and the number attending for only one session at that unit had shown an increase.

Table 2.15

Parental reports of frequency of children's sessions at unit

Frequency of visit	Unit 1 N	1 %	2 N	2 %	3 N	3 %	4 N	4 %	Total N	Total %
Enrolled (1979)(1)										
Less than once a week	1	7	1	6	0	-	4	23	6	9
Once a week	5	33	4	25	0	-	1	6	10	15
Twice a week	9	60	1	6	13	65	12	71	35	51
Three times a week	0	-	10	63	7	35	0	0	17	25
More than three times a week	0	-	0	-	0	-	0	-		-
Total	15		16		20		17		68	
Previously Enrolled (1981)(2)										
Less than once a week	2	22	0	-	0	-	0	-	2	5
Once a week	2	22	1	10	0	-	1	9	4	11
Twice a week	2	22	3	30	2	25	9	82	16	42
Three times a week	2	22	4	40	5	63	1	9	12	32
More than three times a week	1	11	2	20	1	13	0	-	4	11
Total	9		10		8		11		38	
Currently Enrolled (1981)(3)										
Once a week	4	33	7	70	8	47	0	-	19	37
Twice a week	3	25	1	10	9	53	13	100	26	50
Three times a week	4	33	2	20	0	-	0	-	6	12
More than three times a week	1	8	0	-	0	-	0	-	1	2
Total	12		10		17		13		52	

(1) 3 children (4%) did not regularly attend a unit

(2) 3 children (17%) did not regularly attend a unit

(3) 3 children (5%) did not regularly attend a unit

For the children receiving home visits, in both years the modal frequency was less than once per month (64% and 56% respectively for 1979 and 1981) (Table 2.16). Visits on a monthly basis were the next most common pattern for 26% and 33% of the families in the 1979 and 1981 groups respectively.

2.5.2 Primary disabilities. The parents were asked in both years to describe their children's primary disability (see Appendix 4) (Table 2.17). Two classifications were most widely chosen: developmental delay (66% and 64% in 1979 and 1981 respectively), and language delay (20% and 33% respectively). In 1979 a small number of parents at both units 1 and 2 reported that their children were multiply disabled. The 1981 data show a reduction in the number of multiply handicapped children among the families responding to the questionnaire.

Some additional information on the children's disabilities was available from assessment records. In total, records were obtained for 165 of the 225 children who were either currently enrolled as at March 1981 or who had been enrolled at a special preschool. Table 2.18 shows the incidence of disabling conditions reported on assessment files over the period of the monitoring. Down syndrome and non-specific intellectual handicap were the most frequent diagnoses. The diverse range of other conditions less commonly represented in the clientele of the special preschools is shown in Table 2.18.

The high frequency of general developmental delay and language delay reported by the parents of children attending the special preschools is confirmed by analyses of the assessment data contained in case records for the children. Overall, more than forty percent of the children for whom assessment data were available showed some level of intellectual deficit (Table 2.19).

Similarly 43% of the children who had been assessed showed some degree of deficit in language development (Table 2.20).

2.6 Physiotherapy Assessment

Two assessments were undertaken on the older children in the special preschool units - a neuro-sensory-motor assessment and an examination of motor skills.

2.6.1 The neuro-sensory-motor assessment. Neuro-sensory-motor functioning was examined to provide data which were not available from other sources, and also because parents and teachers had requested assessment information in this area.

Table 2.16

Parental reports of frequency of home visits by special preschool staff

	Unit									
Frequency of visit	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Enrolled (1979)[1]										
Weekly	1	11	0	-	0	-	2	18	3	6
Fortnightly	1	11	0	-	0	-	1	9	2	4
Monthly	2	22	6	37	2	18	2	18	12	26
Less than monthly	5	56	10	63	9	82	6	55	30	64
Total	9		16		11		11		47	
Previously Enrolled (1981)[2]										
Weekly	0	-	0	-	0	-	0	-	0	-
Fortnightly	2	40	1	20	0	-	2	50	5	29
Monthly	2	40	1	20	0	-	1	25	4	24
Less than monthly	1	20	3	60	3	100	1	25	8	47
Total	5		5		3		4		17	
Currently Enrolled (1981)[3]										
Weekly	2	33	0	-	0	-	0	-	2	11
Fortnightly	0	-	0	-	0	-	0	-	0	-
Monthly	3	50	1	20	1	17	1	100	6	33
Less than monthly	1	17	4	80	5	83	0	-	10	56
Total	6		5		6		1		18	

[1] 24 (34%) did not receive home visits

[2] 29 (63%) did not receive home visits

[3] 37 (67%) did not receive home visits

Table 2.17

Primary Disability

Disability	Unit 1		Unit 2		Unit 3		Unit 4		Total	
	N	%	N	%	N	%	N	%	N	%
Enrolled (1979)										
Developmental delay	9	60	12	75	14	70	12	60	47	66
Physical	1	7	0	-	0	-	3	15	4	6
Visual	0	-	0	-	0	-	0	-	0	-
Hearing	0	-	0	-	0	-	1	5	1	1
Multiple	2	13	0	-	0	-	2	10	4	6
Language delay	2	13	4	25	6	30	2	10	14	20
Behaviour problems	1	7	0	-	0	-	0	-	1	1
Total	15		16		20		20		71	
Previously Enrolled (1981)										
Developmental delay	3	33	7	54	3	43	7	44	20	44
Physical	0	-	0	-	1	14	1	6	2	4
Visual	0	-	0	-	0	-	1	6	1	2
Hearing	1	11	0	-	0	-	0	-	1	2
Multiple	3	33	1	8	0	-	2	13	6	13
Language delay	2	22	5	38	3	43	5	31	15	33
Total	9		13		7		16		45	
Currently Enrolled (1981)										
Developmental delay	7	58	7	64	11	65	10	67	35	64
Physical	0	-	1	9	0	-	0	-	1	2
Multiple	0	-	0	-	0	-	1	7	1	2
Language delay	5	42	3	27	6	35	4	27	18	33
Total	12		11		17		15		55	

Table 2.18

Frequency of disabling conditions reported on assessment files

	Unit				
Condition	1	2	3	4	Total
Down syndrome	5	8	13	11	37
Intellectual handicap	3	15	4	12	34
Cerebral Palsy	7		1	6	14
Epilepsy	6	-	1	3	10
Hearing loss	2	3	3	1	9
Hyperactivity	2	1	-	3	6
Heart defect	3		1	-	4
Sensory-motor	3	1	-	-	4
Profound mental retardation	3	-	-	1	4
Visual problems not classified blind	3	-	-	1	4
Chromosomal abnormalities (other than Down syndrome)	-	-	1	3	4
Hydrocephalus	1	-	1	1	3
Asthma	1	-	-	2	3
Autism	1	1	-	-	2
Blindness	1	-	-	-	1
Spina Bifida	-	-	-	2	2
Pancreatic Achylia	1	-	-	-	1
Dyphasia	-	-	1	-	1
Cystic Fibrosis	-	-	1	-	1

Table 2.19

Intellectual development deficits (relative to chronological age)for children who had been formally assessed

Deficit in Months	Unit[1] 1[2]	2	3	4	Total
6	2	8	6	4	20
12	3	3	8	6	20
18	-	4	-	5	9
24	-	2	4	3	9
30	-	3	-	1	4
More than 30	1	2	-	9	12
Total	6 (14%)	22 (69%)	18 (50%)	28 (52%)	74 (45%)

(1) Number of children enrolled:

Unit 1 = 43
Unit 2 = 32
Unit 3 = 36
Unit 4 = 54
Total = 165

(2) Some assessment data for unit 1 were not included.

Table 2.20

Language development deficits (relative to chronological age) for children who had been formally assessed

Deficit in Months	Unit (1)				
	1 (2)	2	3	4	Total
6	7	3	1	2	13
12	3	3	3	10	19
18	5	3	2	2	12
24	2	5	-	6	13
30	-	1	-	-	1
More than 30	1	1	2	9	13
Total	18 (42%)	16 (50%)	8 (22%)	29 (54%)	71 (43%)

(1) Number of children who had been assessed:

Unit 1 = 43
Unit 2 = 32
Unit 3 = 36
Unit 4 = 54
Total = 165

(2) Some assessment data for unit 1 were not included.

The neuro-sensory-motor examination used was based on the assessment described by Burns and Watter (1974). This had been further refined for use with minimal cerebral dysfunction (Watter and Bullock, 1977). A variation, used in a multidisciplinary investigation of children aged 3-6 years with minimal brain dysfunction (Steinberg, 1978), was developed as a detailed screening examination of preschool children (Steinberg and Rendle-Short, 1979). The theoretical background of the major areas assessed, the incidence of abnormalities in groups of preschool and school-aged children, the educational implications of dysfunction in the areas selected for assessment, and some management suggestions have been documented and are listed as available material in Appendix 2.

The examination, which takes approximately 15 minutes with children in regular preschools, took longer to administer to the children in the special preschool units, and frequently had to be undertaken over several sessions. Children were examined in the preschool office, in the presence of their teacher and/or parent wherever feasible. It was not always possible to examine all of the children on every item, usually because of inappropriate behaviour. The results, although recorded, have been omitted from the data in the specific tables, with a consequent variation in the sample size.

Each item on the neuro-sensory-motor proforma (Questions 4-51, Appendix 4) was rated on a 4 point scale, from optimal functioning = 1 to severe dysfunction = 4. The raw scores for each item (except item 21, positive supporting reaction, which was omitted from the examination) were added to give a total raw score. In addition, each of the major areas of functioning - significant neurological signs, oculo-motor functioning, primitive reflexes, orientation and postural reactions, tactile functioning, proprioception and vestibular responses to gravity and to angular acceleration, were averaged.

The results for the initial assessments of 89 children for the summary data (Questions 52-59), as well as the total raw score for all items and the total raw score for the summary data, are reported in Tables 2.21 to 2.28.

Eighty nine children, 63 boys and 26 girls, with a mean age of 4 years 7 months were examined. The children were selected from among the four units, with twenty-one from each of units 1 and 2, 27 from unit 3 and 20 from unit 4. A Kruskal-Wallis one-way analysis of variance indicated no significant differences between the units on any of the summary data (Q.52-61).

2.6.2 Significant neurological signs. Symptoms related to neuroanatomical pathology, including deep tendon reflexes, clonus, tremor, involuntary movements and associated reactions, were examined in this section of the assessment.

Table 2.21

The presence of significant neurological signs in special preschool children

n = 83

No significant neurological signs		Some dysfunction		Moderate dysfunction		Severe dysfunction	
N	%	N	%	N	%	N	%
21	*25.3*	59	*71.1*	3	*3.6*	0	-

Most of the children examined (96%) showed relatively normal neurological signs (Table 2.21).

2.6.3 Oculo-motor functioning. Optokinetic nystagmus, convergence fixation, eye follow in all directions, strabismus and the ability to dissociate head and eye movements were examined.

Table 2.22

Oculo-motor function in special preschool children

n = 84

Optimal functioning		Some dysfunction		Moderate dysfunction		Severe dysfunction	
N	%	N	%	N	%	N	%
2	*2.4*	34	*40.5*	44	*52.4*	4	*4.8*

The children showed problems with oculo-motor functioning, as only 2% had optimal responses (Table 2.22) and 57% showed moderate or severe dysfunction.

2.6.4 Primitive reflexes. The persistence of some primitive reflexes (which become integrated in most people) and/or the presence of pathological reflexes were examined.

Table 2.23

The presence of primitive and/or pathological reflexes
in special preschool children

n = 82

No persistent primitive reflexes		Some dysfunction		Moderate dysfunction		Severe dysfunction	
N	%	N	%	N	%	N	%
17	*20.7*	53	*65.6*	12	*14.6*	0	-

Few of the children examined (15%) showed marked retention of primitive or pathological reflexes in the selection of reflexes examined, which included extensor thrust, tonic labyrinthine reflex (TLR), asymmetrical tonic neck reflex (ATNR) and symmetrical tonic neck reflex (STNR).

2.6.5 Orientation and postural responses. The orientation and postural responses examined included the placing reactions, head righting reactions with vision in vertical and horizontal suspension, body on body righting, and the protective reactions of the arms and legs.

Table 2.24

Orientation and postural responses in special
preschool children

n = 85

Optimal functioning		Some dysfunction		Moderate dysfunction		Severe dysfunction	
N	%	N	%	N	%	N	%
5	*5.9*	46	*54.1*	34	*40.0*	0	-

Many of the children (40%) showed marked problems in orienting the body in space even when allowed to use vision.

2.6.6 Tactile responses. Reaction to touch, localisation of touch, and the ability to localise touch on the fingers were examined as representative of tactile functioning.

Table 2.25

Tactile functioning in special preschool children

n = 81

Optimal functioning		Some dysfunction		Moderate dysfunction		Severe dysfunction	
N	%	N	%	N	%	N	%
25	*30.9*	24	*29.6*	19	*23.5*	13	*16.1*

Although 31% of the children had optimal tactile functioning, 40% of children had marked dysfunction in basic tactile responses.

2.6.7 Proprioceptive functioning. Proprioceptive functioning was considered to be the internal perception and analysis of static position and movement, and included kinaesthetic sensations (tendon, joint and muscle sensation), and the sense of equilibrium. Resting muscle tone in the arms, legs and neck, the ability to maintain a position without undue movement both with and without vision, and automatic position awareness, were examined as representative of proprioceptive abilities.

Table 2.26

Proprioceptive functioning in special preschool children

n = 84

Optimal functioning		Some dysfunction		Moderate dysfunction		Severe dysfunction	
N	%	N	%	N	%	N	%
3	*3.6*	23	*27.4*	40	*47.6*	18	*21.4*

The children showed marked problems in proprioception, with only 4% performing at an optimal level, and 69% having moderate or severe problems.

2.6.8 Vestibular responses to gravity. Vestibular functioning related primarily to the utricle and saccule, which respond to changes in the line of gravitational pull, vibration, and linear acceleration and deceleration, was assessed. The ability to reorient the head in space in response to changes in the pull of gravity, without using vision, in both vertical and horizontal suspension was examined. The ability to adjust and maintain dynamic tone in these positions was also examined.

Table 2.27

Vestibular (primarily utricle and saccule) responses in special preschool children

n = 81

Optimal functioning		Some dysfunction		Moderate dysfunction		Severe dysfunction	
N	%	N	%	N	%	N	%
2	2.5	3	3.7	46	56.8	30	37.0

Only two of the eighty-one children examined (2.5%) responded optimally to changes stimulating the utricle and saccule of the vestibular system. The majority of children (94%) had moderate or severe problems.

2.6.9 Vestibular responses to angular deceleration. The response to stimulation of the semicircular canals of the vestibular system was assessed. The duration and amplitude of any elicited post-rotatory nystagmus, tone changes, stability and the nature of any head or body movements following clockwise and counter clockwise spinning were examined.

Table 2.28

Vestibular (particularly semicircular canal) responses in special preschool children

n = 80

Optimal functioning		Some dysfunction		Moderate dysfunction		Severe dysfunction	
N	%	N	%	N	%	N	%
5	6.3	17	21.3	37	46.2	21	26.2

Many children experienced marked problems in the aspect of vestibular functioning related to semicircular functioning, as 72% had moderate or severe dysfunction.

Tables 2.21 to 2.28 showed that many of the special preschool children had considerable problems in the separate areas of neuro-sensory-motor functioning examined, particularly in the proprioceptive and vestibular systems. The incidence of dysfunction was considerably higher than would have been expected in regular preschool children of similar age given the findings of Steinberg and Rendle-Short (1979). Knowledge of these systems is not necessarily part of a teacher's theoretical or practical experience.

The total raw scores for the 46 items showed considerable variation among the 74 children for whom complete data were available, with a range of 58 to 152. The mean of 116.6, mode of 119 and median of 118.5, should be compared with an optimal score of 46 (the standard deviation = 18.34).

The sample was also divided into the children with and without Down syndrome. Twenty-nine children (22 boys and 7 girls) formed the Down syndrome group, and 60 children (41 boys and 19 girls) the non-Down syndrome group. A Mann-Whitney U-test on the summary data (Questions 52-59) and raw scores of the neuro-sensory-motor assessment indicated no significant differences between the groups. A student t-test on the raw scores also showed no significant differences between the Down syndrome and non-Down syndrome children.

The sample was also divided according to sex (63 boys and 26 girls). A Mann-Whitney U-test and student t-test indicated no significant differences ($p<.01$) between the two groups formed on sex.

Twenty-four of the 89 children were re-assessed. The mean time between assessments was 10 months and the standard deviation was 4.62 months. A Friedman two-way analysis of variance showed that, although all scores improved, there were no significant differences between the initial assessment and re-assessment scores for each major area of functioning examined (Questions 52-59). The mean ranking of the detailed raw score for all items improved from 1.75 to 1.25 ($p<.019$).

2.6.10 The assessment of motor skills. Some motor skills were examined in addition to the neuro-sensory-motor assessment because the teachers and parents felt that the children had fewer problems in gross motor functioning than in other areas such as language.

The evaluation of gross motor skills developed in conjunction with several studies involving normal infants, as well as Down syndrome and cerebral palsied children (Clark, Chee, Kantner and Kreutzberg, 1976), quantifies motor performance by grading each item on a 6 point scale from 0 - 5. Nine items - crawling, walking without support, kicking a ball, jumping (horizontal with two feet), walking up stairs, and equilibrium in standing - were selected for use with the special preschool children. The optimal score for each item was 5, with the total possible score equal to 45.

Eighty-three of the 89 older children were examined. Two of the severely handicapped children at unit 4 scored 0, while three of the 83 scored the maximum of 45. The mean score (S.C. = 9.1) for the motor skills assessment was reasonably high at 38.1 (mode 43, median 41.1) which reflected the teachers' and parents' views. The results for the individual items assessed are presented in Table 2.29.

Table 2.29

Distribution of raw scores on selected items from the evaluation of the motor skills of the special preschool children (0 = Minimal 5 = Optimal)

n = 83

	Graded	Score										
Motor Skill	0		1		2		3		4		5	
	N	%	N	%	N	%	N	%	N	%	N	%
Crawling	2	*2.4*	0	-	0	-	0	-	2	*2.4*	79	*95.2*
Walking	4	*4.8*	0	-	0	-	0	-	1	*1.2*	78	*94.0*
Kicking ball	4	*4.8*	0	-	0	-	1	*1.2*	4	*4.8*	74	*89.2*
Jumping	10	*12.1*	14	*16.9*	10	*12.1*	1	*1.2*	32	*38.6*	16	*19.3*
Walking on toes	8	*9.6*	5	*6.0*	1	*1.2*	2	*2.4*	1	*1.2*	66	*79.5*
Walking backwards	4	*4.8*	0	-	0	-	1	*1.2*	1	*1.2*	77	*92.8*
Equilibrium on one leg	6	*7.2*	4	*4.8*	13	*15.7*	27	*32.5*	18	*21.7*	15	*18.1*
Walking up stairs	5	*6.0*	0	-	0	-	6	*7.2*	30	*36.1*	42	*50.6*
Equilibrium in standing	4	*4.8*	0	-	0	-	1	*1.2*	7	*8.4*	71	*85.6*

Over 90% of the children obtained the optimal score in crawling, walking and walking backwards. Kicking a ball, equilibrium in standing and walking on toes were achieved at optimal level by around 80% of the special preschool children. The children had the greatest difficulty in standing on one leg and in jumping a horizontal distance with two feet together, both of which are advanced motor skills.

The Mann-Whitney U-test and the student t-test on the raw score and individual items of the motor skills test indicated no significant differences between the Down syndrome and non-Down syndrome groups of children.

Significant differences ($p<.01$) were found between the boys and girls in the sample in walking without support, kicking a ball, and walking on toes when the Mann-Whitney U-test was used, but no significant differences were found between boys and girls on any of the motor skills assessment data using a student t-test.

On re-assessment of 24 children, no significant differences were found between the initial and re-assessment scores for the items of the motor skills test. Overall, however, the mean ranks for the total raw score of the motor skills test improved from 1.18 to 1.82 ($p<.008$).

The two assessments (2.6.1 and 2.6.2) indicated that there was a considerable discrepancy between optimal neuro-sensory-motor functioning and the achievement of optimal scores on motor skills at the level examined (i.e. crawling, walking and so on). Teachers and parents noticed the achievement of motor skills, but may need to be more aware of the possibility of less obvious neuro-sensory-motor dysfunctions which may affect the child's development, performance and behaviour in educationally significant ways.

2.7 The Home Visit Study

Forty-two families were visited at home between July and November 1980, for the purpose of formal data collection. Three types of data were collected in these visits : first, information about the medical and developmental histories of the children; second, assessment of the characteristics of the home environments and, finally, parental perceptions of the special preschool units and their value. Additional data were also available from the neuro-sensory-motor assessments of the children and the questionnaires previously completed by the parents involved in the home visit study. The aim was to provide further descriptions of some of the salient contextual features of the pilot early intervention programs.

2.7.1 Sample selection. The sample was selected in consultation with the teachers at each unit, and families who had indicated any reticence about home visits were not approached. The degree of bias resulting from the selection procedures cannot be assessed, but the sample may be representative of only the subset of families willing to volunteer for inclusion in the home visits and/or with whom the monitoring team had established rapport. The numbers of families selected from each unit are given in Table 2.30. Unit 1 had the smallest number of families selected for inclusion in the study, while almost three-quarters of the families attending unit 2 were home visited.

Table 2.30

Numbers of families selected from each unit for inclusion in the Home Visit Study with total numbers of families during the period of the study

Unit							
1		2		3		4	
N	(%)	N	(%)	N	(%)	N	(%)
8	(27)	13	(72)	11	(37)	10	(30)
Total:							
30		18		30		33	

Of the children home visited, 20 (48%) were, in March 1981, still enrolled in the units. Almost all children were regarded by teachers as attending (or having had attended) their units regularly. Four children were regarded as having had irregular attendance and three received home visits only. Of these children, only one child was no longer placed in a unit. Table 2.31 relates age to current placement. It should be noted that 22 children were, at March 1981, no longer enrolled in the special preschool units.

2.7.2 Parents' coding of primary disability. From parent questionnaires completed in 1979 and 1981, a demographic picture of the children is as follows: seventeen of the children (41%) were regarded by their parents as developmentally delayed, ten (24%) were said to have language or speech difficulties, two children were said to be multiply handicapped, and one to be physically disabled. Eighteen of these children (43%) were Down syndrome children.

Table 2.31

Age of child in current placement (as at March, 1981)

n = 42

Age range	Early Educational Intervention Program	Regular preschool	Kindergarten /daycare	Special school	Total
Younger than 3 years	5				5
3 to 4	5			1	6
4 to 5	5	2	1	2	10
5 to 6	4	1		2	7
6 or older	1			13	14
Total	20	3	1	18	42

As almost half the children had been classified as having Down syndrome, it may be useful to compare their assessment data separately with that of the other children in the program. Table 2.32 reports the assessment data for the Down syndrome and all other children.

2.7.3 Developmental history. The developmental history score derives from structured interviews based on the form used by Rutter, Tizard & Whitmore (1970). The inventory asks about social, gross motor, and linguistic development as well as the age of development of bowel and bladder control. A score of 8 is considered optimal for the normally developing child. Higher scores may indicate developmental delay. As can be seen from Table 2.32, both groups of children have higher scores, pointing to the general developmental delay present in both samples. The medical history data record the number of illnesses in specific areas. In general, the range of illnesses per child for both groups is from zero to seven, with averages of 2.5 and 2.75 for the Down syndrome and the other groups respectively.

2.7.4 The home environment. The quality of the home environment is indicated by the Home Inventory Score (see Appendix 4 for a copy of the inventory). The total raw score can be compared with the U.S. norms. A total raw score of 37 - 49 is equivalent to the upper quartile of the U.S. comparison sample, and on average the homes visited corresponded to this level of home environmental quality. The standard deviation and range, however, indicate the considerable variability in the quality of home environments represented in this, albeit biased, sample of families with children attending a special preschool.

2.7.5 Physiotherapy assessments. The neuro-sensory-motor and motor scores derive from the assessment procedures described in 2.6 above. A score of 46 is the optimal score for a normally developing child. Again, the deviation of both groups in the home visited sample from the normal pattern of neuro-sensory-motor development is quite clear. The motor skill assessment also shows a clear departure from the pattern of optimal development. A score of 45 or greater is considered evidence of optimal motor skill development. Scores of less than 45 indicate impaired motor development. All children showed some degree of impaired motor skill.

2.7.6 Comparison of Down syndrome and non-Down syndrome groups. Mann-Whitney U-tests for two independent samples showed non-significant differences between the Down syndrome and non-Down syndrome children for each of the assessment scores. There was, however, a trend to significant differences for the ages of the two groups, with the Down syndrome children being on average older (two-tailed test $p<.08$). Given the difference in chronological age, it can be concluded that the degree of difference from the optimal attainment on the developmental delay is,in fact, qualitatively greater for the Down syndrome children.

2.7.7 Comparisons of currently enrolled and previously enrolled groups. The children currently enrolled in the units were compared with the children previously enrolled in 1980 when home visited (see Table 2.33). As would be expected, there was a significant difference in age (Mann-Whitney U, two-tailed test, $p<.0001$). There were, however, no significant differences on any of the assessment scores, again suggesting a greater degree of developmental delay for those children in the previously enrolled subsample than for those currently enrolled. Caution must be exercised, however, in interpreting these negative results.

2.8 Availability of Assessment Information

It was difficult to obtain a more detailed picture of the developmental characteristics of the children. Psychological, or linguistic, assessment of individual children was not within the compass of the monitoring project's resources, and release of additional guidance officers to assist with assessment was not feasible.

Table 2.32

Assessment data on the children and families home visited, for Down syndrome and non-Down syndrome classifications

Group	Mean	S.D.	Range
Age of children at assessment (months)			
Down syndrome	48.17	20.65	24 - 82
Non-Down syndrome	59.08	11.79	34 - 75
Summary of developmental history score			
Down syndrome	15.67	3.56	11 - 21
Non-Down syndrome	16.17	4.14	10 - 25
Summary of medical history			
Down syndrome	2.5	3.56	1 - 5
Non-Down syndrome	2.75	2.05	0 - 7
Summary of home inventory			
Down syndrome	42.94	8.71	28 - 55
Non-Down syndrome	41.79	12.25	13 - 54
Summary of neuro-sensory-motor scores			
Down syndrome	119.54	18.95	84 - 152
Non-Down syndrome	110.72	20.55	54 - 140
Summary of motor skills assessment			
Down syndrome	36.46	5.13	29 - 43
Non-Down syndrome	37.90	6.46	22 - 44

Table 2.33

Assessment data on the children and families home visited, for those children currently enrolled at March 1981, and those previously enrolled

	Mean	S.D.	Range	N	% of population
Age of children at assessment (months)					
Currently enrolled	46.3	14.44	24 - 70	20	48
Previously enrolled	64.5	11.96	34 - 82	22	52
Summary of developmental history scores					
Currently enrolled	15.60	3.50	10 - 21	20	48
Previously enrolled	16.27	4.22	10 - 25	22	52
Summary of medical history					
Currently enrolled	2.70	1.34	0 - 5	20	48
Previously enrolled	2.59	2.04	0 - 7	22	52
Summary of home inventory					
Currently enrolled	41.25	10.46	13 - 54	20	48
Previously enrolled	42.23	11.20	13 - 55	22	52
Summary of neuro-sensory-motor scores					
Currently enrolled	113.61	16.97	84 - 150	13	
Previously enrolled	115.00	22.50	54 - 152	18	
Summary of motor skills assessment					
Currently enrolled	36.21	4.92	29 - 43	14	
Previously enrolled	38.15	6.58	22 - 44	20	

2.8.1 Assessment data base. The records of assessment of the children and their developmental characteristics were obtained from files of the special preschool units,(1) the guidance officers(2), and the Central Assessment Clinic of the Division of Intellectual Handicap Services. The teachers and guidance officers were asked to supply files for any child who had been referred to and enrolled in an early educational intervention program. The Central Assessment Clinic staff were requested to provide the assessment files for any children who had been either considered as potentially suitable for placement in a special preschool program, and/or referred to a program. Only the files for those children actually enrolled in a program were included in the assessment data set. All files were photocopied, numerically coded to protect the identity of the family, and the information summarised.

Table 2.34 reports the total numbers of children in the units and the total number of assessment interviews. An interview was defined as any contact with a particular professional on a particular occasion, as a result of which assessment of diagnostic information had been recorded on the child's assessment file. Overall, each child received an average of two interviews. When examined more closely (Table 2.35) the data show a wide range and there was an extremely marked variability in the number of interviews per child. For example, for the two groups examined (i.e. children who had left the program by December 1980 and those still enrolled in 1981), approximately one-third had not had an assessment interview (34% and 27% for the 1980 and 1981 data respectively). Approximately one-quarter (25% and 27% respectively) had had only one interview and a further quarter (24% and 22%) had been interviewed on two or three occasions.

Table 2.34

Total numbers of children and assessment interviews for these children

Group	Total number of children	Total number of interviews	Number of interviews/child
Children who had left program by December 1980	131	264	2.0
Currently enrolled (1981)	94	188	2.0
Total	225	452	

---

(1) Teacher assessments are discussed in the following chapter.

(2) Some of the guidance assessments at unit 1 were not available at the time of closing data collection. The figures for this unit therefore underestimate the total numbers of assessments.

Table 2.35

Number of interviews (by all agencies) for each child in each of the four special preschool units

	Unit									
Number of Interviews	1(1) N	%	2 N	%	3 N	%	4 N	%	Total N	%
Children who had left the Program by December 1980										
0	13	33	8	29	10	40	14	34	45	34
1	10	26	5	18	8	32	10	24	33	25
2	7	18	2	7	1	4	4	10	14	11
3	4	10	2	7	4	16	7	18	17	13
4	1	3	1	4	0	-	0	-	2	1
5	2	5	2	7	0	-	1	3	5	4
6	1	3	1	4	0	-	3	8	5	4
7	0	-	1	4	1	3	1	3	3	2
8	0	-	1	4	0	-	0	-	1	1
9	1	3	1	4	1	4	0	-	3	2
10	0	-	1	4	0	-	0	-	1	1
More than 10	0	-	2	8	0	-	0	-	2	1
Total	39		27		25		40		131	
Currently Enrolled (1981)										
0	0	-	7	33	10	38	8	28	25	27
1	5	28	5	24	8	31	7	24	25	27
2	3	17	0	-	4	15	4	14	11	12
3	5	28	2	10	1	4	1	3	9	10
4	3	17	3	14	3	12	5	17	14	15
5	1	6	1	5	0	-	3	10	5	5
6	1	6	2	10	0	-	1	3	4	4
7	0	-	1	5	0	-	0	-	1	1
8	0	-	0	-	0	-	0	-	0	-
9	0	-	0	-	0	-	0	-	0	-
10	0	-	0	-	0	-	0	-	0	-
More than 10	0	-	0	-	0	-	0	-	0	-
Total	18		21		26		29		94	

---

(1) Some assessment data for Unit 1 were not included

Table 2.36

Area of interview

	Unit									
	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Children who had left the program by December 1980										
Physiotherapy	6	9	17	19	3	8	5	7	31	12
Speech Pathology (1)	2	3	12	13	3	8	5	7	22	8
Speech Therapy (1)	14	22	6	7	2	5	11	16	33	13
Occupational Therapy	8	12	11	12	2	5	2	3	23	9
Psychology	10	15	34	37	16	42	35	51	95	36
Social Work	4	6	6	7	0	-	1	1	11	4
Vision	0	-	0	-	0	-	3	4	3	1
Medical	7	11	3	3	1	3	0	-	11	4
Audiology	4	6	3	3	3	8	3	4	13	5
Education (teacher)	2	3	0	-	0	-	0	-	2	1
Education (guidance officer)	8	12	0	-	8	21	4	6	20	8
Total	65		92		38		69		264	

(1) The terms speech pathology and speech therapy are taken directly from the assessment records.

Table 2.36 (continued)

	Unit									
	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Currently Enrolled (1981) (1)										
Physiotherapy	5	10	11	23	4	13	9	16	29	16
Speech Pathology (2)	4	8	2	4	0	-	1	2	7	4
Speech Therapy (2)	7	14	6	13	3	10	11	19	27	14
Occupational Therapy	5	10	3	6	5	16	7	12	20	11
Psychology	1	2	20	43	10	32	14	25	45	24
Social Work	2	4	1	2	1	3	2	4	6	3
Vision	4	8	0	-	0	-	0	-	4	2
Medical	11	21	0	-	1	3	1	2	13	7
Audiology	9	17	4	9	1	3	3	5	17	9
Education (teacher)	2	4	0	-	0	-	3	5	5	3
Education (guidance officer)	2	4	0	-	6	19	6	11	14	7
Total	52		47		31		57		187	

(1) Missing observation = 1

(2) The terms speech pathology and speech therapy are taken directly from the assessment records.

Table 2.37

Interviewing agencies

	Unit									
Number of	1 (1)		2		3		4		Total	
Interviews	N	%	N	%	N	%	N	%	N	%
Children who had left the program by December 1980										
CAC	32	49	71	77	11	29	28	41	142	54
GSE	19	29	14	15	23	61	35	51	91	35
Hospitals	5	8	0	-	0	-	1	1	6	2
School Health Services	1	2	0	-	0	-	2	3	3	1
National Accoustics Laboratory	1	2	3	3	3	8	3	4	10	4
Spastic Welfare Association	1	2	0	-	0	-	0	-	1	-
Other *	6	9	4	4	1	3	0	-	11	4
Total	65		92		38		69		264	
Currently Enrolled (1981)										
CAC	17	33	39	83	14	47	34	58	104	55
GSE	2	4	4	9	6	20	8	14	20	11
Hospitals	10	19	0	-	1	3	1	2	12	6
School Health Services	11	21	0	-	1	3	0	-	12	6
National Accoustics Laboratory	4	8	4	9	0	-	3	5	11	6
Spastic Welfare Association	0	-	0	-	0	-	9	15	9	5
Other *	8	15	0	-	8	27	4	7	20	11
Total	52		47		30		59		188	

(1) Some assessment data for Unit 1 were not included

* This category includes all agencies who had one or two interviews only. It includes: Yeronga Child Guidance Clinic, University of Queensland Child Health, Division of Community Health Inala, Governor Diagnostic and Assessment Clinic N.S.W., Division of Community Health Woodridge, Department of Community Welfare, Indooroopilly Child Guidance, Greenslopes Child Guidance, and University of Queensland Occupational Therapy Department.

2.8.2 Frequency and pattern of assessment. The total numbers of children who had assessment interviews have been reported in Table 2.34. The numbers of interviews for each child in each preschool have been documented in Table 2.35. For each group, the largest set of interviews could be classified as psychological in area of emphasis (Table 2.36). Physiotherapy, speech therapy or occupational therapy were the next most frequent areas in which assessment interviews had been conducted.

The agency whose professionals conducted the greatest number of these interviews was the Central Assessment Clinic (Table 2.37). This applied for both groups of children. The Division of Guidance and Special Education was the next most heavily involved agency. The lower involvement of guidance officers in assessment interviews with the children currently enrolled in March 1981 in part reflects the trend to assessing prior to placing the child at the end of his/her time in the special preschool. The frequency of contact with the National Accoustics Laboratory was less than expected.

2.8.3 Comparison of pattern of assessment by the Central Assessment Clinic and the Division of Guidance and Special Education. Tables 2.38 and 2.39 respectively examine the numbers of children interviewed by the Central Assessment Clinic and Guidance and Special Education personnel. While Central Assessment Clinic had performed more interviews with both groups of children, fewer children had been involved in these interviews (only 25% in the group which had left by December 1981, and 37% in the group currently enrolled in 1981). (Table 2.38). In contrast, for the children who had left the program by December 1980, Guidance and Special Education personnel had interviewed 47%, the majority of these only once. For the group of children enrolled in 1981, only 20% had been interviewed by guidance personnel (Table 2.39). As stated earlier, this trend reflects the policy of formally assessing predominantly when later placement decisions are to be made. To summarize, Central Assessment Clinic personnel assessed fewer children, but conducted more assessment interviews with these children over the period of contact, while Guidance and Special Education personnel saw more children but had less contact (in terms of interviews) with each child assessed. Guidance and Special Education personnel reported referrals of children to other agencies such as the Central Assessment Clinic, Community Health Services, and the National Accoustics Laboratory. It was, however, very difficult to gauge the incidence of such referrals from the records available to the monitoring team.

2.8.4 Formal assessment instruments and procedures. Table 2.40 details the types of formal assessment instruments and/or procedures and their frequency of use. The children who had left by December 1981 were assessed most commonly with three types of assessment instruments: the Reynell Scales (23%), the Stanford Binet Form LM (15%) and a Physiotherapy clinical assessment procedure (11%). The D.A.S.I. and

Table 2.38

Number of children interviewed by Central Assessment Clinic staff for each child in each of the four special preschool units

	Unit									
Number of	1[(1)]		2		3		4		Total	
Interviews	N	%	N	%	N	%	N	%	N	%
Children who had left the Program by December 1980										
0	29	74	15	57	22	88	32	80	98	75
1	1	3	1	4	1	4	1	3	4	3
2	4	10	1	4	0	-	1	3	6	5
3	2	5	1	4	0	-	2	4	5	4
4	0	-	1	4	1	4	2	4	4	3
5	1	3	2	7	0	-	1	3	4	3
6	2	5	1	4	1	4	1	3	5	4
7	0	-	2	7	0	-	0	-	2	2
8	0	-	1	4	0	-	0	-	1	1
9	0	-	0	-	0	-	0	-	0	-
10	0	-	0	-	0	-	0	-	0	-
More than 10	0	-	1	4	0	-	0	-	1	1
Total	39		26		25		40		130	
Currently Enrolled (1981)										
0	11	61	9	44	21	82	18	62	59	63
1	0	-	3	15	1	4	3	10	7	7
2	5	28	1	4	1	4	0	-	7	7
3	1	6	3	15	1	4	3	10	8	9
4	1	6	2	9	2	6	3	10	8	9
5	0	-	1	4	0	-	2	8	3	3
6	0	-	2	9	0	-	0	-	2	2
7	0	-	0	-	0	-	0	-	0	-
8	0	-	0	-	0	-	0	-	0	-
9	0	-	0	-	0	-	0	-	0	-
10	0	-	0	-	0	-	0	-	0	-
More than 10	0	-	0	-	0	-	0	-	0	-
Total	18		21		26		29		94	

(1) Some assessment data for unit 1 were not included

Table 2.39

Number of children interviewed by Guidance & Special Education staff for each child in each of the four special preschool units

	Unit									
Number of Interviews	1(1)		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Children who had left the program by December 1980										
0	28	72	16	59	10	40	16	40	70	53
1	7	18	9	33	10	40	15	38	41	31
2	2	5	1	4	2	8	7	17	12	9
3	0	-	1	4	3	12	2	5	6	5
4	2	5	0	-	0	-	0	-	2	2
Total	39		27		25		40		131	
Currently Enrolled (1981)										
0	16	89	17	81	21	81	21	72	75	80
1	2	11	4	19	4	15	8	28	18	19
2	0	-	0	-	1	4	0	-	1	1
Total	18		21		26		29		94	

(1) Some assessment data for unit 1 were not included

the Bayley scales were the next most frequently used instruments (Table 2.40). The Bayley scales and physiotherapy clinical assessments have been most widely used with the children currently enrolled in 1981 (Table 2.40) but, again, the picture is incomplete, given the limited time these children have been involved in early intervention. It must be recognized, however, that many of these children may have been assessed prior to entry in 1981. As Table 2.41 indicates, 84% of those who had been assessed were assessed before entry to the special preschool, 57% during 1980.

Clearly a wide range of instruments was being used for assessment of a limited section of the total population of children in both groups.

2.8.5 Reassessment. Very few reassessments seem to have been undertaken. Table 2.42 shows the numbers of children in the combined groups who have had two or more assessment interviews in the one area of functioning. Multiple psychological assessments were most frequent, followed by speech therapy assessments. The Stanford-Binet Form LM was the most frequently used instrument in multiple assessments (Table 2.43).

2.8.6 Teacher comments on assessment. During the 1979 and 1981 interviews, the teachers were asked to comment on the assessment information available to them. Their major concerns could be summarized in the following terms. First, they strongly expressed a need for better assessment information on the child's initial entry to the unit. Second, they emphasized the need for ongoing assessment at regular intervals during the child's stay in the special preschool. Third, they accentuated the need for specialist assessments in the areas of physiotherapy and occupational therapy. Fourth, they stressed the need for assessment information to guide program development. Fifth, they affirmed the value of assessment in settings other than the units, such as regular preschools, where appropriate, and the child's home. And, finally, they pointed to the need for better record keeping systems enabling reporting of a comprehensive range of information concerning each child.

2.9 Conclusions

The initial impression of the complexity of the contexts of the four pilot early educational intervention programs has been confirmed by the data discussed in this chapter. The location, clientele, and information base for each unit complexly interact and should modify the characteristics of the program developed to meet the needs of the particular set of children (and their families) at each unit. The following chapter examines some of these influences upon the resultant programs.

Table 2.40

Types and frequency of tests or inventories used in formal interviews

	Unit									
	1(1)		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Children who had left the program by December 1980										
Bayley Scale Infant Behaviour	2	6	0	-	2	6	0	-	4	2
Bayley Mental Scale & Bayley Motor Scale	2	6	8	11	3	9	2	3	15	7
Merrill Palmer Scale	3	9	4	6	2	6	4	6	13	6
Reynell Scales	2	6	10	14	4	11	15	23	31	15
Binet Form LM	1	3	19	26	10	29	17	26	47	23
Conditioned Orientation Response Audiometry	3	9	1	1	1	3	2	3	7	3
Impedance Audiometry	2	6	3	4	2	6	0	-	7	3
Griffiths Mental Development Scale	1	3	7	10	0	-	0	-	8	4
McCarthy Scales of Children's Abilities	2	6	0	-	3	9	1	2	6	3
Peabody Picture Vocabulary Test	1	3	0	-	1	3	0	-	2	1
Developmental Activities Screening Inventory	0	-	2	3	0	-	14	21	16	8
Illinois Test of Psycholinguistic Abilities	1	3	1	1	0	-	1	2	3	1
Clinical Assessment (physio)	6	18	14	1	3	9	3	5	22	11
Gesell Developmental Scale	1	3	0	-	1	3	0	-	2	1
Stycar Vision Test	0	-	0	-	0	-	3	5	3	1
Other *	7	21	7	10	3	9	4	6	21	10
Total	34		72		35		66		207	

* Including tests that were employed only once or twice over both groups: Peabody Kit, Fisher Price Shape Sorter, Assessment of Children Language Comprehension, Houston Developmental Language Scales, Pure Tone Audiometry, Queensland Test of Articulation Competence, Language Assessment Renfrew Action Pictures, Vineland Social Maturity Scale, Self Help Skills, Entiknap Picture Vocabulary, Auditory Bureau Comprehension, Renfrew Word Finding Vocabulary Scale, Meeting Street Scale, Denver Developmental Screening Test.

(1) Some assessment data for unit 1 were not included

Table 2.40 (cont'd)

Types and frequency of tests or inventories used in formal interviews

	Unit									
	1 (1)		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Currently Enrolled (1981)										
Bayley Scale Infant Behaviour	0	-	3	8	2	8	0	-	5	4
Bayley Mental Scale & Bayley Motor Scale	0	-	15	39	7	27	9	33	31	27
Merrill Palmer Scale	1	4	1	3	4	15	1	4	7	6
Reynell Scales	1	4	1	3	1	4	3	11	6	5
Binet Form LM	0	-	0	-	3	12	3	11	6	5
Conditioned Orientation Response Audiometry	5	21	0	-	0	-	2	7	7	6
Impedance Audiometry	4	17	2	5	0	-	1	4	7	6
Griffiths Mental Development Scale	0	-	3	8	3	12	0	-	6	5
McCarthy Scales of Children's Abilities	0	-	0	-	0	-	1	4	1	1
Peabody Picture Vocabulary Test	0	-	0	-	1	4	0	-	1	1
Developmental Activities Screening Inventory	0	-	1	3	0	-	0	-	1	1
Illinois Test of Psycholinguistic Abilities	0	-	0	-	1	4	0	-	1	1
Clinical Assessment (physio)	5	21	8	21	3	12	5	19	21	18
Gesell Developmental Scale	1	4	0	-	0	-	0	-	1	1
Stycar Vision Test	3	13	0	-	0	-	0	-	3	3
Other *	4	17	4	11	1	4	2	7	11	10
Total	24		38		26		27		115	

* Including tests that were employed only once or twice over both groups: Peabody Kit, Fisher Price Shape Sorter, Assessment of Children Language Comprehension, Houston Developmental Language Scales, Pure Tone Audiometry, Queensland Test of Articulation Competence, Language Assessment Renfrew Action Pictures, Vineland Social Maturity Scale, Self Help Skills, Entiknap Picture Vocabulary, Auditory Bureau Comprehension, Renfrew Word Finding Vocabulary Scale, Meeting Street Scale, Denver Developmental Screening Test.

(1) Some assessment data for unit 1 were not included

Table 2.41

Year of interviews

	Unit									
Year	1(1)		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Children who had left the program by December 1980(2)										
Before 1978	2	3	23	25	3	8	0	-	28	11
1978	10	16	35	38	5	13	8	13	58	23
1979	25	40	14	15	16	42	30	47	85	33
1980	21	34	16	17	12	32	25	39	74	29
1981 (to March 31)	4	7	4	4	2	5	1	2	11	4
Total	62		92		38		64		256	
Currently Enrolled (1981)										
Before 1978	1	2	4	9	0	-	0	-	5	3
1978	2	4	16	34	5	16	3	6	26	14
1979	3	6	3	6	9	29	2	4	17	9
1980	30	60	22	47	11	36	40	77	103	57
1981 (to March 31)	14	28	2	4	6	19	7	14	29	16
Total	50		47		31		52		180	

(1) Some assessment data for unit 1 were not included

(2) Missing observations = 8

Table 2.42

Number of children with two or more interviews in the same area for all children interviewed across the total monitoring period

Area	N
Physiotherapy	7
Speech pathology/therapy	15
Occupational therapy	4
Psychology	30
Social work	2
Audiology	2

Table 2.43

Children who have been assessed twice or more with the same test or inventory (total group)

	N
Bayley Scale Infant Behaviour	0
Bayley Mental Scale	5
Bayley Motor Scale	1
Merrill Palmer Scale	1
Reynell Scales	4
Binet Form LM	9
Conditioned Orientation Response Audiometry	0
Impedance Audiometry	1
Griffiths Mental Development Scale	0
McCarthy Scales of Children's Abilities	1
Peabody Picture Vocabulary Test	0
Developmental Activities Screening Inventory	0
Illinois Test of Psycho-linguistic Abilities	0
Clinical Assessment (physiotherapy)	4
Gesell Developmental Scale	0
Stycar Vision Test	0

CHAPTER 3

PROGRAM DEVELOPMENT : PROCESSES AND PRODUCTS

3.1 A General Discussion of Factors Influencing the Design of Early Educational Intervention Programs

The previous chapter described some features of the contexts in which the four pilot programs evolved. The pattern of contextual features was shown to be a diverse one with important differences in the characteristics of the children, their families and their circumstances. Both the amount and type of assessment information available on the children attending the preschool units varied considerably, adding to the complexity.

From the outset it was apparent that the development of the intervention programs in each special preschool would also reflect differences in the teachers' philosophies, their interpretations of the broad guidelines provided by the Department of Education, the range of their functions, the nature of the preschool setting, the availability of support services, and teachers' responses to parental expectations. An important objective of the monitoring project was to describe the patterns of evolution of the pilot programs and to analyse the features of the programs developed over the monitoring period. The following chapter focuses on both the process of program development and the records produced by the teachers in each of the four preschools.

Figure 3.1 portrays the interrelation among the variables that impinge on the development and implementation of any program for exceptional children.

As suggested in Chapter 1, the Education Department information statement provided a set of broad statements of the general philosophy and guidelines for the development of early educational intervention programs. The interpretation of these broad guidelines in part reflected the particular educational backgrounds and philosophies of the teachers. These, in turn, interacted with the characteristics of the clientele to lead to the development and implementation of intervention programs. The nature of the program, and the manner of its implementation, may be modified by a number of factors, such as the constraints imposed by the teachers' other responsibilities, the adequacy of communication with other professionals, the equipment and facilities and, finally, the availability of professional support services.

The discussion to follow examines each of these factors in detail, with the exception of the support services, which will be discussed in Chapter 4.

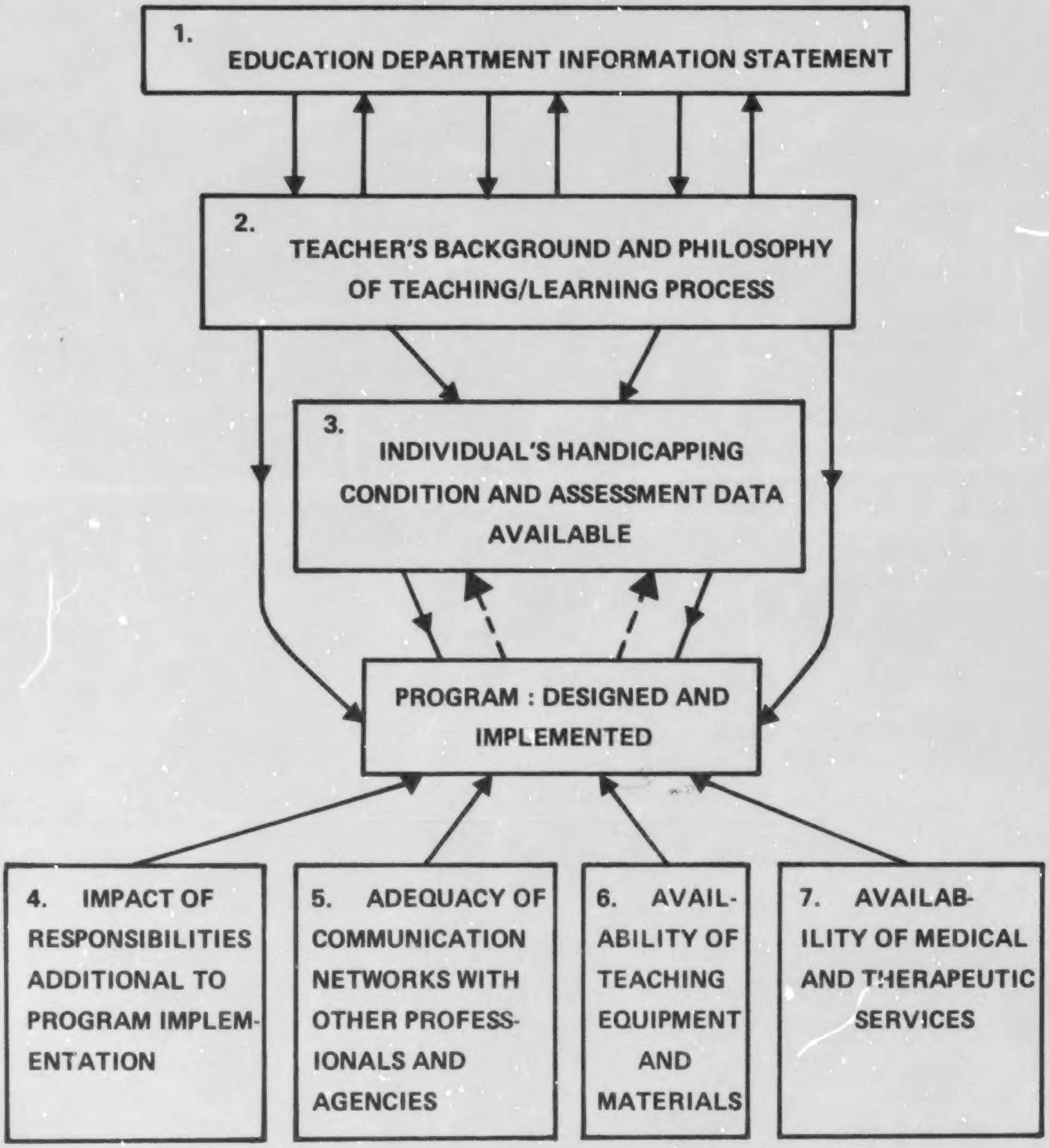
1. EDUCATION DEPARTMENT INFORMATION STATEMENT
2. TEACHER'S BACKGROUND AND PHILOSOPHY OF TEACHING/LEARNING PROCESS
3. INDIVIDUAL'S HANDICAPPING CONDITION AND ASSESSMENT DATA AVAILABLE
PROGRAM : DESIGNED AND IMPLEMENTED
4. IMPACT OF RESPONSIBILITIES ADDITIONAL TO PROGRAM IMPLEMENTATION
5. ADEQUACY OF COMMUNICATION NETWORKS WITH OTHER PROFESSIONALS AND AGENCIES
6. AVAILABILITY OF TEACHING EQUIPMENT AND MATERIALS
7. AVAILABILITY OF MEDICAL AND THERAPEUTIC SERVICES

Figure 3.1

Factors influencing the design of Early Educational Intervention Programs

3.1.1 The Education Department information statement. Four key principles of early educational intervention programs were emphasized in the Education Department's information statement:

(a) Provision of planned education from the earliest possible age.

(b) Close involvement of parents and family in the education process.

(c) Keeping a wide range of educational options open for the child.

(d) Maximizing the opportunity of the child to experience a wide range of behavioural models.

These principles have had a discernible influence on the programming and activities of the four units so far established. The first principle has had a direct influence in determining the age of the clientele. Each unit, in principle, takes children from the earliest age of identification of need; at least one group in each unit's weekly program is a 'baby group'. The second principle has influenced the method of operation of each of the units. Three types of programs have developed: home based programs, unit based programs, and integrated home and unit based programs. The third principle has manifested itself as a reaction against premature labelling. The implications for group organization and program management of a non-categorical approach to educational provision will be considered in a later section. The fourth principle also has had its most obvious effect in the implementation of the program; an extended range of behaviour models is introduced into the program by having some of the children visit, and others enrol at, regular preschools. The mothers of children attending the program are also encouraged to meet or to participate in playgroups in which there are both handicapped children and some non-handicapped children.

Another facet of the departmental philosophy, as expressed in the information statement, which has influenced the program is the curriculum content. The areas to be covered, if the child is to be assisted in his mastery of the environment, include: sensory skills, physical skills, attending behaviours, motivation, speech and language development, creativity and problem solving, personal and social development, and the development of independence and a positive self-image. These areas form the guidelines for the curriculum content in the intervention units. The individual handicapping condition of each child, however, determines the priority placed on elements within the program implemented for him.

3.1.2. Teacher's background and philosophy of the teaching and learning process. Anastasiow (1978) describes four basic preschool model programs: "behavioural", "normal developmental", "cognitive developmental", and "cognitive learning". These models are, in actuality, not discrete entities but serve to identify some broad approaches to programming in preschool settings. The particular developmental needs of a young handicapped child may lead to an approach to programming that is distinctly different from the types of programs required by normally developing children. Combinations of program components may be required to take account of the varying spectrum of developmental characteristics manifest in a particular young handicapped child. The utility of Anastasiow's categorization lies in the sharp focus it provides on the differing sets of assumptions that have operated throughout the evolution of preschool programs in both regular and special settings.

Inseparably linked with the adoption of a particular model (or combination of models) by the teacher, is the latter's philosophy of teaching and learning. When dealing with handicapped children the normal developmental model may have little application. The current state of knowledge of the developmental course of the broad range of exceptionalities precludes simple comparisons with the developmental course of normal children. Some comparisons can be usefully made but there is a real danger in assuming that both normality and exceptionality can be defined with reference to a continuum, with delay characterizing the exceptional end of that continuum. Both researcher and practitioner must entertain the possibility that for many exceptionalities the course of development may be fundamentally different from that of normal children. Considering the three remaining models, Anastasiow sees their major difference as lying in the teacher's perception of the learner as active/passive participant. The perception that the teacher has of the child and his way of learning may strongly influence the type of program developed.

One commonality across the three types of program is the belief that developmental milestones should be met. From this point, however, there is divergence in view as to whether these developmental tasks are achieved through environmental/biological interactions, or through training. A close examination of program activities, objectives and evaluation techniques is required to reveal the particular beliefs expressed.

3.1.3. Individual handicapping condition and assessment data available. The Education Department's information statement indicates that the children to be selected for enrolment in the early intervention units are those infants and preschoolers with developmental problems considered likely to interfere with their later school progress. Such problems may be associated with physical, intellectual, speech and language, neurological or emotional development.

From this description, and from the data presented in Chapter 2, it can be appreciated that the range of disabling conditions - both primary and secondary - present in the clientele of the four units is very wide and that within this range the degree of severity of disability is extremely varied. These characteristics of the clientele influence the program development in two ways: they may determine, firstly, the composition and size of the instructional groups and, secondly, the priority instructional areas incorporated in the programs.

As Chapter 2 indicated, the nature of the assessment data available to the teachers also varies. This is in part a function of the range of referring bodies and the differences in their policies and approaches to assessment. The amount and nature of the assessment data available affect the initial content and the emphases in the instructional program which is developed.

3.1.4. Impact of responsibilities additional to program implementation. The nature of most extra responsibilities could be classified as liaison: liaison with parents, and liaison with other community bodies. The most direct influence that this aspect of the teacher's role has on the programs developed is in terms of the time taken to make contact with other groups and agencies. If too much time is devoted to this aspect of the role, there may be insufficient time available for other program related duties.

3.1.5. Adequacy of communication networks with other professionals and agencies. Two features are of particular relevance here: first, the availability of support services and, second, the ability of all personnel to function as members of a multi-disciplinary team.

The two features are directly relevant to the types of programs developed and implemented. The content, planning and organization of programs are influenced by both of the features mentioned.

3.1.6. Availability of teaching equipment and materials. The range and suitability of equipment and materials also affect the nature of the programs designed. To be considered are the environmental characteristics of the unit: for example, playground equipment and land contours, as well as the equipment needed for implementation of the programs.

3.2 The General Model Developed for Program Records : A Review of Teacher Comments

3.2.1. Education Department information statement. The teachers in each of the four units were interviewed, and their comments relating to each aspect of the general model were recorded. On many issues there was a high degree of consensus, but opinions varied across some of the basic issues.

Key Principle 1: Planned education from the earliest age.

A general comment on their lack of appropriate preparation for working with infants of two years or younger was made by all the teachers. Some felt that the type of intervention needed by these infants was therapeutic rather than educational. The teachers holding this view would prefer other agencies to cater for this particular category of clientele. Each of the four units was, however, and still is, actively involved in delivering both home and unit based services for infants. The measure of success achieved by the teachers in this area of their programs is an indication of their individual resourcefulness.

One of the teachers expressed the view that, even though an undertaking had been made to offer planned education from the earliest age, this option was not being utilized to its fullest advantage. In part, this resulted from the fact that many children were not recognized as having a problem until they entered the education system at the preschool level. The cause for this was twofold: first, there was the inadequacy of screening networks operating with very young children and, second, many conditions may not become manifest until the child enters an educational setting.

Key Principle 2: Close involvement of parents in the educational process.

A sampling of comments made by the teachers in an interview situation illustrates the diversity of opinion within the group:

- *Parents are encouraged to attend a playgroup operated as part of the unit's program. There is greater parental interest and involvement in 1981 than there was in 1980.*
- *There is no pressure on the parents to be actually involved in their child's program at the unit. We try to tailor the mother's involvement in the unit to suit her needs.*
- *The educational process is a parent/child process, so we feel that it is imperative for the parents to be involved.*

- *We deliberately do not include parents in the unit's programs for three reasons -*

  1. *the parents are shown how to handle/ teach their child by all other agencies attended;*
  2. *it is better for the parents not to be comparing their child's performance level against other children in the group;*
  3. *it is good for the parents to have a short period of time away from their child.*

Key Principle 3: Wide range of educational options

All the teachers felt that the non-categorical approach was a worthwhile principle. However, a few of the teachers had some reservations about operationalizing it. Two major reasons were given by these teachers to support their opinion.

- *For some parents, if a name can be given to the child's handicap, their task of accepting the situation and coping with it is an easier one.*
- *If one is able to guard against the danger of lowering one's expectations because of the effects of premature labelling, it is a useful and efficient form of organizing one's thoughts.*

All of the teachers did agree that there was a wide range of educational options open to the children. However, there was a range of opinion to explain this phenomenon.

- *We feel the early intervention practice is having some influence on the wider range of placement options open to the children.*
- *The educational options for the child are kept open, because of the growing trend of "transfer" from one agency to another, as the child's educational needs demand.*
- *There is a general trend for greater flexibility in the placement of children.*

- *This wider range of options is being made available because of a general trend operating in the overall education system.*

Key Principle 4: Maximum opportunity to experience a wide range of behavioural models.

The teacher achieved this in a variety of ways. In each unit, children of preschool age were integrated into the program of a regular preschool unit for a number of sessions each week. Belief in the value of this form of integration was expressed by all of the teachers. In some of the units other techniques were followed, in an effort to maximize the range of behavioural models to which the children were exposed.

- *Normal siblings are present at the unit while the child is attending a session.*
- *Arrangements have been made for a group of children to share music lessons with the year one children from the adjacent primary school.*
- *Reciprocal visits are arranged with the adjacent preschool.*
- *Non-handicapped children, who are known to the teacher, attend the unit for some sessions.*

The areas listed in the Education Department's information statement as areas to be covered(1) if the child is to be assisted in his mastery of the environment, have consistently influenced the programs developed in each of the four units.

3.2.2. Teacher's philosophy of the teaching/learning process. The philosophical underpinnings on which the programs had been developed were varied, as would be expected of a group of teachers with varied backgrounds and experience. Three assumptions were common to all of the teachers' models of the teaching/learning process. In the teachers' words:

- *With handicapped children there is a need to "set up" or structure the learning environment so that the child's efforts are focussed.*
- *A normal developmental model is inappropriate for the children attending the early educational intervention programs.*

---

(1) See above

- *It is important to plan to assist the child to reach milestones, but the nature of these and the method used to achieve them will depend on the child's specific deficits and his learning style.*

Other statements made by the teachers reflect the range of programming assumptions in individual philosophies.

- *The child's social and emotional needs must be met first, before a structured educational program can be undertaken.*
- *The role of the teacher is to provide a broad range of learning situations in order to expose the children to a wide variety of learning experiences.*
- *Only the tasks for which a child is developmentally ready should be included in his program.*
- *The importance of group functioning as a preparation for school is one feature stressed in the child's program.*

In summary, the basic premises underlying the development of the programs are essentially similar for all of the teachers involved. Personal emphases, however, ultimately influenced the direction in which each program was developed.

3.2.3. Individual handicapping condition and assessment data. From the general model of factors influencing the design of early educational intervention programs (see Figure 3.1), two facets of the program development were seen as being most immediately affected by the child's handicapping condition: first, the composition and size of the instructional group and, second, the priority instructional areas incorporated in the programs.

A sample of the comments made by the teachers indicated how influential a consideration the child's handicapping condition was for group formation:

- *The child's primary presenting handicap was the criterion used for group formation.*
- *The children were grouped according to their most obvious disabilities.*
- *The groups were organized on the primary criterion of language level.*

- *The primary criterion used for organizing groups was developmental age, and for this we considered mainly cognitive and language factors as well as the child's level of social interaction.*

Once the groups had been formed, the teachers established general, long term goals, in most instances spanning the full year. The child's specific deficits, and the nature and detail of the assessment data available, played an important role in the establishment of these goals. The majority of the teachers utilized a thematic planning approach, in order to have a common thread running through activities developed in each program.

3.2.4. Extra responsibility placed on teachers. All teachers initially stressed that the activities they listed in this section were viewed, not as added responsibilities, but more correctly as extra facets of their role. Because the interpretation of a teacher's role is a very individual matter, a wide range of emphases was evident in this section. The following comments, recorded from interviews with the teachers, illustrate the range of variation:

- *Liaison with other professionals and parents is seen as an integral part of the role.*
- *Some of our extra activities include extra social support for parents, referral of parents to other agencies, arrangement of mothers' meetings, having literature available for loan to parents, and student pre-service education.*
- *Considerable efforts should be made in the area of public relations work, e.g. addressing local schools, hospitals etc.*
- *Social/emotional support for parents of children attending the units.*

Even though a widely varied list of added responsibilities was presented by the teachers, none felt that these encroached to the extent of preventing the allocation of adequate amounts of time to their other duties.

3.2.5. Communication networks with other professionals and agencies. From the inception of the early educational intervention programs this has been an area of service delivery which has been dynamic; consequently, the nature of the teachers' comments altered over the course of the monitoring project. An exception to this tendency was that the teachers consistently indicated their concern about the relative absence of physiotherapy services. Many of the children attending the units were receiving physiotherapy service from other agencies, but the co-ordination of the information from numerous agencies remained a major problem. The teachers indicated that the most useful therapy scheme for them, in relation to program development and implementation, would be in the form of demonstration and consultation. This points to the need for therapists who can be involved with the teachers, the children and the programs, within the units themselves.

The provision of speech therapy services has been dependent on the number of therapists available from within the staffing of the Education Department. This has varied considerably from time to time and from unit to unit. The teachers indicated that they would also prefer a demonstration and consultation service from these therapists.

The teachers felt that the service provided by the guidance officers and medical officers was adequate and of an appropriate nature. They did, however, indicate that more hours would be appreciated from both of these services.

3.2.6. Availability of teaching equipment and materials. All of the teachers indicated that they were satisfied with the equipment and materials supplied by the Education Department, either as an initial stock issue or from subsequent grants. Some specific statements were made by the teachers from various units, with regard to the equipment supplied:

- *The equipment provided and grants given were very generous.*
- *...fairly adequately supplied with equipment.*
- *...generally satisfied with the quantity and suitability of the material supplied.*

The teachers did make some comments relating to the suitability of the materials supplied and of those availabe commercially:

- *Some of the departmental material supplied is inappropriate as it is felt to be at too high a developmental level.*
- *The range of commercially available material, suitable for the unit's clientele, is limited.*

As a consequence of these factors, the teachers themselves have often had to design and develop materials at an appropriate level. Two comments relating specifically to physical conditions were made by teachers:

- *The greatest problem is felt to be the inadequacy of parking space. The distance to walk from the parked car to the unit is too far for a physically handicapped child or for a mother with several small children.*

- *Gross motor (outdoors) equipment is lacking.*

3.3 Description of 1980 Programs, from Four Brisbane Early Educational Intervention Units (1)

3.3.1. Aims and objectives of programs. The information on aims and objectives was gathered from three sources - written program records, interviews and questionnaires, and work-face observations. Reference has not necessarily been made to each of these sources in every section discussed below.

Program objectives can be examined at three levels: first, long term objectives, stated in general terms and covering the term of the child's involvement with the program; second, intermediate term objectives, relating to specific skill areas and covering a 4 to 6 week program period; and third, short term objectives related to specific sessions or lessons.

(a) Types and levels of objectives: information from written program records.

While long term objectives were not stated explicitly in the program records, the organization of program groups and timetabling provided a basis for identifying implicit long term objectives. As such, all programs implicitly stress the development of competence in the cognitive, social, self-help, language and psycho-motor areas; and it was clear that the teachers were concerned with wider (developmental) issues, and not just the development of a restricted set of school related skills.

---

(1) The format for the description has been adapted from guidelines for analysis of early childhood education programs in Frost, J. and Hawkes, G. (Eds.), The Disadvantaged Child, Issues and Innovations, 2nd Ed., New York, Houghton Mifflin, 1970.

Table 3.1

1980 Weekly timetables and long term objectives set for groups, for four Early Education Intervention units

Timetable 1

Monday	Tuesday	Wednesday	Thursday	Friday
Home visits	Home visits	Younger preschool group (9 children)	Younger preschool children (9 children)	Babies group (every second week)
Older preschool group (6 children)	Older preschool group (6 children)	Older preschool groups (6 children)	Preschool visits Playgroup	Seminars

Example 1

Long term objectives

Time	Categorization	Objective
Morning groups (Younger/baby groups)	Developmental lag across all areas	Work with parents to enhance development
Afternoon groups (older preschool)	Developmental lag across all areas	Enhance development with and without parents

Timetable 2

Monday	Tuesday	Wednesday	Thursday	Friday
Older preschool group	Older language delay group	Older language delay group	Older preschool group	Older preschool group
Home visits	Language delay	Baby group	Language delay	Seminar

Table 3.1 (cont'd)

Example 2

Long term objectives

Time	Categorization	Objective
Mon/Thurs/Fri. morning	Down syndrome	School readiness in broadest sense
Wednesday afternoon	Developmentally delayed (baby group)	Motor/Developmental facilitation
Tuesday/Wednesday	Developmental delay	Preparation for life*
Tuesday/Thurs. afternoon	Developmental delay	Preparation for life*

* Preparation for life - has been defined by the teacher using the term to mean - social, communicative, physical and sensory skills, rather than the more narrowly defined "living skills" activities.

Timetable 3

Monday	Tuesday	Wednesday	Thursday	Friday
Behaviour problems	Behaviour problems	Visits	Multi-handicapped	Multi-handicapped
Language delay	Language delay	Preparation and visits	Home visits	Home visits

Example 3

Long term objectives

Time	Categorization	Objective
Mon/Tuesday morning	Behaviour problem	Modifying behaviour to be socially acceptable

Example 3 (cont'd)

Time	Categorization	Ojective
Mon/Tuesday afternoon	Language delay	General language stimulation

Timetable 4

Monday	Tuesday	Wednesday	Thursday	Friday
1. Advanced preschool group 2. Younger preschool group	1. Advanced preschool group 2. Younger preschool group	1. Babies 2. Multi-handicapped	Multi-handicapped	Parent meetings
Older pre-school group	Moderate develop-mental delay	Moderate develop-mental delay	Older pre-school group	Home visits

Example 4

Long term objectives

Time	Categorization	Objective
Monday/Tuesday morning (older group)	Language delay	Preparation for appropriate school placement
Monday/Tuesday morning (Younger group)	Developmental delay	Establish basic skills which will enhance success in more formal setting
Tuesday/Wednesday afternoon	Moderate development delay	Emotional support for parents Modification of child's behaviour
Wednesday morning	Multihandicapped Down syndrome babies	Parent support informal, social setting which is stimulating for all children
Thursday morning	Language delay	Language development

With a wide range of handicap and an age span of five years characterising the clientele of the units, some variations in long term objectives were to be expected. The organization of each unit program implementation and the weekly timetable for the several groups of children gave some further insight into the long term objectives held for the various groups. Age or major presenting handicap seems to have provided the basis for group organization and timetabling. The particular organization of the timetable also indicated the long term objectives for each group within a particular unit. Table 3.1 presents the 1980 weeky timetables for the four units.

As with the long term objectives, the intermediate term objectives for each of the skills areas had not been stated explicitly in the program records. By examining the written programs, however, it could be seen that the intermediate term objectives were drawn from the following skills areas: music and rhythmic movement skills, gross motor skills, fine motor skills, language and speech skills, cognitive skills and social/self-help skills.

The programs showed considerable variation in the method used to categorise the activities. A closer examination of the written records, however, revealed a comprehensive coverage of the six major skills areas in each program. The organization or programs in each unit also suggested that every effort was made to expose each child, in his weekly attendance, to a wide range of activities.

With the short term instructional objectives, a variety of formats was used for recording purposes. Table 3.2 illustrates this variety. Each of the intermediate range skills areas has a specific list of activities recorded for each programming session. Two of the four program formats (see examples 1 and 3 in Table 3.2) recorded short term objectives explicitly. The remaining record formats listed the activities to be undertaken but did not state short term objectives explicitly.

Table 3.2

Sections from program formats for specific instructional objectives

Example 1

Objectives	Activities
Does up hooks and eyes	Free play
Does up buttons	
Revise placing rings in order	Brio pyramid
Revise placing rings in order	Brio pyramid
Revise placing stacking cups in order	
Puzzle No. 20	
Talks to other children	Lego blocks
Plays with one other child	Dolly corner

Table 3.2 (cont'd)

Example 2

Time	Activity	Materials required	Special objectives
12.45	Free play	Dough	1. Encourage S. (tackle difficulty)
		Scooter Board	2. Encourage use of scooter board
		Fisher Price Hospital	3. Encourage S. to use puzzles - very poor fine motor skills
		Insets (6-8 insets)	
		Three piece puzzle	4. Obtain photographs
		Pictures and camera	

Example 3

Activities	Materials
Cognitive	
1. Shape printing - on 3 sheets of card to be made into cylindrical mobiles - circle, square, triangle	Paint, shapes, plates, large sheets of paper
2. Number - decorate birthday cakes. Make several cakes each. Glue on candles and count them.	Card cakes Cut out candles

Example 4

Activities	Materials
1. Picture matching	Lotto 5A
2. Shape matching	Figure A7, A8
3. Picture identification	Ship, car, plane, bus, bike
4. Colour	"The Big Red Ball"
5. Concepts	Big/Little

(b) Types and levels of objectives : information from interviews and questionnaires

The interviews with the teachers provided further evidence of the teachers' concern with broad developmental issues. The following comments taken from these interviews illustrate this point:

- *For the older preschool group the program undertaken at the unit was viewed as a general enrichment program. Very broad, long term goals were set for the children in the areas in which the program was developed.*
- *A very general long term goal (e.g. to improve language skills) was set for each child for the year.*
- *The long term goals were planned and projected over a twelve month period. The original long term goals were very general in nature.*

The teachers' interpretations of their role also appeared to have an influence on both long term and short term objectives. The following comments highlight the effect of the teacher role, as interpreted by each teacher, on the development and implementation of the long term objectives.

- *We see our role as being the provision of as broad a range of learning situations as possible, in order to expose the children to a wide variety of learning experiences.*
- *We believe in planning to assist the child to reach certain milestones, but which milestones and the method used to achieve them, will be dependent on the child's handicap, learning style, etc.*

A further salient influence on the implementation of programs in the short term involved the unpredictability of day to day events within each unit. Teachers stated that the planned short term objectives often were not achieved. A variety of unpredictable factors, for example outside interruptions, non-participation by the child, unexpected responses by the child, all acted to alter the implementation of the program. The teachers generally felt that an important aspect of their role was dealing with such unexpected situations as they arose. A direct result of this interpretation of role was the achievement of many objectives not planned and recorded, and the non-achievement of some short term objectives in the time period initially established. Some of the interview comments reinforced the point:

- *Many of the short term objectives related to the social-emotional areas have not been recorded, because these issues have been dealt with as they have arisen.*
- *There was a general interest theme (e.g. the family, food, etc.) used as a source for the activities for the cognitive and language areas. However, the duration of each theme was entirely dependent on the children's reactions to the activity's development.*

There were other factors which also had an influence on the achievement of planned objectives. These included the varying effects of parental participation in the framing of goals and the requirements of joint planning with other professionals. Again, the interviews highlighted these issues:

- *For young children/babies group the degree of parental involvement was high. Discussions were held between the teachers and parents to set up and to review the long term objectives later. The parents had a strong influence on the nature of the goals set for the children in this group.*
- *Joint planning and full co-operation between the teachers and the speech therapist was felt to be of utmost importance. We (the teachers) made every effort to reinforce, in our activities with the children, the skills being developed by the speech therapist.*

(c) Types and levels of objectives : information from observations

A period of time in each unit, observing the implementation of programs, reinforced the earlier opinions formed: that the teachers were centrally concerned with fostering the overall development of the children in their units. The children in each unit participated in activities drawn from all of the following areas: music and rhythmic movement; gross motor skills; fine motor skills; language and speech skills; cognitive skills; and social/self help skills. A program composed of each of these skills areas may be classified as a comprehensive program.

Program implementation was predominantly on a group basis, but within that group structure the children worked at their individual levels. The children's initial differences were catered for in three observable ways: first, by offering children differing amounts of teacher assistance; second, by providing materials of appropriate complexity and, third, by allowing children to work at a suitable pace. In some activities, for example craft activities for fine motor skills, gross motor activities, music and rhythmic movement activities, each child worked on the same activity but differing amounts of assistance were offered to the children by the teachers and aides. In this way individual levels of functioning were catered for. Another way was by providing materials of graded levels of complexity with each child working at his individual level. Further individualization was achieved by allowing each child to proceed at his own pace.

As stated earlier, unpredictability of program implementation on a day to day basis was an important factor in the achievement of specific program objectives. This feature was particularly highlighted in the observation sessions at each unit. For example, an incident at one of the units illustrates this point very succinctly: because of a single child's misbehaviour, the teacher had to spend all of the time allocated to a specific activity for the group dealing with the inappropriate behaviour. This was a vivid illustration of just one of the many unplanned interruptions that can occur, and thus prevent the achievement of specific program objectives in the original time planned. This incident also illustrates the statement made by the majority of teachers - that before planned, structured teaching/learning activities can be engaged in, the child's social and emotional needs must be catered for.

(d) Aims and objectives - degree of specificity : information from written program records

Teachers differed in the ways they recorded their programs. The range of variation is indicated by the headings used:

activity, materials, comments, evaluation;
activity, equipment, evaluation;
objective, activity, comment, program revision;
time, activity, materials required, specific objective, evaluation;
objective, activity, day 1, day 2, day 3;
activity, equipment, comments.

It can be appreciated after examining the recorded program formats, and bearing in mind the detailed nature of the activities recorded for each skills area, that the program records reveal a high degree of specificity (for full examples see Appendix 1). For each format criterion responses for each activity were pre-determined and it was in the light of this criterion level of performance that the individual child's program was modified and developed.

(e) Aims and objectives - degree of specificity : information from interviews/questionnaires

Despite differing philosophies and methods of operation, the teachers stated a belief in the importance of a high degree of specificity in program objectives. Three points mentioned by all the teachers were:

- *The need to assist the child to reach particular milestones in each of the skills areas.*
- *The dependence of the choice of milestones and the methods used to achieve them on each child.*
- *The need to structure "set up" learning situations to assist the handicapped child to focus, to attend to, or to concentrate on particular activities.*

Their reasons for the differing specificity varied, as the following sample of comments illustrates:

- *We believe in planning to assist the child to reach certain specified milestones.*
- *We design our programs to ensure that the children experience success.*
- *Activities are planned for implementation in a group setting, but within this context each child is functioning at his individual level.*
- *Activities were undertaken with the development of a particular skill in mind.*

The above comments show some of the underlying reasons for the specific nature of the program objectives. The teachers were planning and implementing programs at an individual level, and this necessitated a very high degree of specificity.

(f) Aims and objectives - degree of specificity : information from observations

Observations in the units clearly indicated the highly specific nature of the programs, the fact that the programs were organized to enable implementation on a group basis and that, within the group, each child was considered as an individual. This high degree of individualization had been achieved in the three ways mentioned - varying complexities of materials, individual pacing and differing amounts of personal assistance from teachers and aides. These three strategies, employed to ensure individualization, were evident both in the recorded information and also in direct observations. The amount of individualized attention and direction particularly occurring in the context of informal play quickly became apparent during the observation sessions. It was often this very important feature of program implementation in the less formal aspect of the program that was unrecorded. Because of lack of time, the teacher might simply record "play in dolly corner" where in actuality three or four very specific short term goals might have been accomplished with one or all of the children in the group.

The importance of the adult to child ratio, in relation to the implementation of a highly specific program, also became obvious through observational study. The implementation of a program, operating on a group basis, required that the teacher be able to organize the activities for each session, so that one or each of the children had some time in a one to one situation. There were four aspects of program implementation that could be observed in the units and which underscored the vital importance of having very low adult to child ratios. First, a low adult to child ratio was especially important to facilitate the monitoring of the program and its implementation. If the teacher was to ensure a period of controlled observation of one or more of the children, the program must be organized so as to release one adult to undertake this task. This type of organization, permitting a reasonable degree of flexibility, pointed to the need for a low adult child ratio. Second, a low ratio was required if the program was to accommodate individual pacing on certain activities. The third aspect was closely linked to the second. In some situations, for example craft activities, a one to one organization could be a necessary feature of program implementation. Most of the skills needed for craft are complex - for example, cutting, folding and pasting require complex combinations of component skills; if the child was to be assured of success in these types of activity, in which a concrete product is the final result, close adult guidance was necessary. Finally, the handicapping condition of some of the children attending the units made easy mobility a problem for them. For these children, an adult in close attendance to encourage and aid motor performance was an important feature of their individualized program.

(g) Aims and objectives - product/process emphasis of goal statements : information from written program records

Before commencing the discussion for this section, our interpretation of the terms 'product' and 'process' needs to be clarified.

In framing written objectives, process and product statements need to be distinguished. The process aspect of the objectives refers to the teaching procedures, instructional settings and adult roles, while the product aspect refers to outcomes observed in the children's behaviour. An objective can be framed exclusively in process or in product terms, but more usually it consists of a combination of both.

The discussion of relevant issues is presented here with direct references being made to the contents of Table 3.3.

Table 3.3

Examples of product/process emphases in goal statements

Example 1

Objective	Activity	Comment	Program Revision
Does up hooks & eyes Does up buttons	Free play	Cannot do up/ undo buttons -	Straps) one Buttons) to one
Revise placing rings in order	Brio pyramid		
Revise placing stacking cups in order		Built tower, but not in order of size	Stacking cups 1-4 with visual model.
Puzzle No. 19			Puzzle No. 20
Talks with other children	Lego blocks (build house)	Trial & error placement - didn't want to finish	
Plays with other child	Dolly corner	6 word phrases	

Table 3.3 (cont'd)

Example 2

Objective	Activity	Comment	Day 1	Day 2	Day 3
1. Talks to other children	Leischman Blocks	More interested in blocks			
2. Plays with one other child	Free play - Dolly corner (emphasis on kitchen equipment - food packets)	Resisted B's attempt to take things away from him		-	-

Example 3

Activity	Equipment	Comments	Evaluation
Painting and paper folding - on white table, fold paper in half first. Place paint on line. Fold again and press. Open to look at effect.	Small pieces of paper. Larger pieces of paper. Paint	Child 1: Good folding - grasped concept quickly. We talked about big/small and effects of paint Child 2: Folding poor and wanted to paint whole page. Couldn't or wouldn't choose between large/small piece of paper	

Table 3.3 (cont'd)

Example 4

Time	Material Required	Activity	Specific Objective	Evaluation
12.30	Go Game (Rings on Rod), Cat, Dog, Cow, Pig, Lady, Man	Attention extending activities	Wait - 10 seconds before naming of object Two part command - non-related Fine motor practice	
1.30		Obstacle course Gross motor	Enforcing concentration on body in space Crawling, rolling	M. very much improved. Still falling but trying

Example 5

Activity	Equipment	Evaluation
Music		
Touching body parts Finger play -	Hap Palmer record	Waits for other children to give the lead
A little ball, a bigger ball Little Peter Rabbit	3 sizes of ball	Catching co-ordination needs improvement. Throwing good, counts to 3
Articulation "f"	Flies	Produces "F" not "fl"
Percussion instruments Colour song - red/yellow	Hap Palmer record Red/yellow objects	Plays on after music stops - reaction time +3 secs. Doesn't keep rhythm

Table 3.3 (cont'd)

Example 6

Activity	Equipment	Comments
Sensory motor	Scooter board	When feet are held, moves his hands more readily. Patterning is better
	Trampoline	X legged sitting on trampoline is more relaxed. Concentration is improving

An examination of Example 1 in Table 3.3 reveals that there has been equal emphasis placed on product and process aspects of the written objectives. The 'objective and comment' sections have been made in terms of measurable outcomes in the child's behaviour, whereas the activity and program revision areas have been developed with process considerations in mind. The activity column lists required materials, while the program revision column contains descriptions of modifications necessary, in materials and teaching procedures, to ensure the child experiences success on the next presentation of the activity.

The remaining five examples in Table 3.3, though displaying some variation in format, have a basically similar structure. The activity and equipment columns have been developed with an emphasis on the process component, while the evaluation component of the program formats displays a definite product emphasis. The goal statements in the six formats in Table 3.3 therefore consist of a combination of process and product emphases.

(h) Aims and objectives - product/process emphasis of goal statements : information from interviews/ questionnaires

In their interviews, all the teachers indicated the importance of carefully structuring the learning environment, so the child's efforts could be directed or focussed. This concern of the teachers indicates that the process aspect of the objective was being considered, even though it may not have been recorded in detail in the written program. The evaluation/comment section in the program formats contains information related to the child's performance in the various skills areas. Thus the evaluation of the objectives was made in product terms.

From information gathered from questionnaires, all of the teachers indicated that in the planning stages for specific program objectives, an equal emphasis was placed on the process/product aspects of the goal statements. It could be concluded that the teachers were concerned with the achievement of specific outcomes in the child's behaviour and also with issues related to the teaching procedures, instructional settings and adult roles which must be considered if these goals were to be attained.

(i) Aims and objectives - objectives expressed in terms of expected changes in program procedures and adult roles : information from written records

By examining the program records over a period of several weeks, it was possible to observe the progressive modifications implemented in the teaching procedures and in adult roles.

As stated, the process aspects usually were not explicitly noted. However, there were some specific examples in the program records where such procedures were recorded.

Table 3.4 has two such examples taken from program records.

Table 3.4

Examples of objectives expressed in terms of expected changes in program procedures and adult roles

Example 1

Objective	Activity	Comments	Program Revision
Pedals tricycle	Outside play	Tricycle - needs to be pushed - will keep feet on pedals but will not turn	Practise - get up speed and encourage to sustain
Catch bean bag from 5 feet. Throw accurately from 5 feet	Circle game	Catching 50% if reminded to keep hands together	Catch large ball

Table 3.4 (cont'd)

Example 2

Activity	Materials	Comments	Evaluation
Collage Make a red collage. Finally introduce one piece of shiny paper which is "not red"	Paste,brushes Large sheet paper Red paper One piece shiny paper	Distracted by feel of glue when using brush and Clag - tried to rub it off. I tried to get S. dipping in pot of glue - unsuccessful Success eventually with brush in pot Better involvement when circle covered with glue and S. only had to put pieces of paper on	-

(j) Aims and objectives - objectives expressed in terms of expected changes in program procedures and adult roles : information from interviews/ questionnaires

In response to a questionnaire the teachers indicated that they place equal emphasis on the product and the process aspects when planning specific program objectives. The modifications of program procedures or adult roles, indicated by the child's performance on planned program objectives, were noted by the teachers but not necessarily recorded. They stated, however, that this information is held in mind and does influence the subsequent activities included in the program. The teachers and aides were then cognizant of necessary modifications to be made in their programming for the child in particular activities. These aspects of the written objectives were, therefore, the implicit knowledge that guided the teacher in modifying materials and procedures when a child experienced difficulties. It was this same knowledge that enabled the teacher to make informed judgements as to the suitability of various instructional methods for each child. In this way, all the factors closely linked to program implementation needed to be addressed in these process aspects of the written program objectives.

3.3.2. Principal program components or procedures.

(a) Issues related to initial student assessment

There was no formal assessment information available on enrolment for approximately one third of the children, as indicated in Chapter 2. For those for whom assessment information was available, the range was from one to nine assessments per child. Most of this assessment information originated from one, or both, of the two major referring agencies - the Guidance and Special Education Branch or the Health Department's Central Assessment Clinic of the Division of Intellectual Handicap Services. Supplementary information came from the National Accoustics Laboratory, Royal Children's Hospital, Child Guidance Clinics and the University of Queensland Child Health Department. The range of assessment instruments on which the information was based is shown in Table 3.5.

Table 3.5

Assessment instruments/techniques used for initial student assessment

Audiological	Occupational Therapy	Physiotherapy	Psychological	Social Work	Speech Therapy
N.A.L. Reports including: 1. Conditioned (Orientation Response Audiometry) 2. Impedance audiometry 3. Pure-tone audiometry	1. Gesell Developmental schedules 2. Griffiths Mental Development Scale 3. Activity observation analysis & self-help skills	1. Clinical assessment observation/ reporting	1. Bayley Scales - infant behaviour, mental, motor. 2.Binet Form L.M. 3. Developmental Activities Screening Inventory 4. Enticknap Picture Vocabulary 5. Fisher Price Shape Sorter 6. Griffitn Mental Development Scale	1. Self help skills	1. Assessment of children's language comprehension 2. Auditory Bureau Comprehension 3. Houston Developmental Language Scales 4. Illinois Test of Psycholinguistic abilities

Table 3.5 (cont'd)

Audiological	Occupational Therapy	Physio-Therapy	Psychological	Social Work	Speech Therapy
			7. McCarthy Scales of Children's Abilities 8. Merrill Palmer Scale 9. Peabody Picture Vocabulary Test 10. Renfrew Language Assessment (Action Pictures) 11. Reynell Verbal Comprehension Scale 12. Vineland Social Maturity Scale		5. Queensland test of Psycholinguistic abilities 6. Peabody Kit 7. Renfrew Word Finding Vocabulary Scale 8. Reynell Developmental Language Scales (revised edition) 9. Reynell Expressive Language Scale 10. Reynell Scale B 11. Reynell Verbal Comprehension Scale 12. Meeting Street Scale

The amount of information available to the teacher on a child's entry to a unit may have a direct influence on program development. The appropriateness of the goals established is related to the accuracy of assessment data available to the teacher in the first instance. General comments made by the teachers indicated that they valued relevant assessment data accompanying the child on his entry to the unit, because it simplified their task of establishing the initial focus of their program.

Therefore, the initial assessment information served two purposes. Firstly, it helped the professionals involved determine the child's suitability for placement in the special unit. Secondly, once placement had been agreed upon, the accompanying assessment data guided the teacher in her formulation of the three levels of objectives necessary for program development.

(b) Issues related to subsequent student assessment

The three most important functions of ongoing student assessment are directly related to the child's educational program. First, the information can be an integral part of the instructional program, as in the behaviour management approaches. Second, it can also provide the feedback necessary for the continuing reformulation of program objectives. Finally, ongoing assessment is necessary for reviewing the appropriateness of the placement. Table 3.6 has the data from a questionnaire completed by the teachers from the special units. The teachers were commenting on the reasons for undertaking three forms of assessment - formal, informal recorded, informal non-recorded.

Table 3.6

Reasons for undertaking three forms of assessment

Reasons for Undertaking Assessment	Formal Assessment	Informal Recorded Assessment	Informal Non-recorded Assessment
Placement in educational agencies	85% of response		
Feedback to begin/shape program		85% of response	50% of response
Integral part of instructional program		15% of response	50% of response
Research	15% of response		

It is relevant to note that the informal recorded and non-recorded assessments were undertaken by the teachers, and usually not by any of the other professional people involved in the special units. The reason for this was related to case-load pressures, which minimised the amount of time available to therapists and medical personnel for engaging in observational forms of assessment. The teachers had the greatest amount of contact with the clientele of the units, and therefore were in a better position to use informal assessment techniques than other professional personnel. The information from these assessments was used in program development and modification, as Table 3.6 shows.

A collection of teacher developed informal recorded assessment instruments is listed in Appendix 3.

(c) Materials and equipment

The commercially available materials and equipment were acquired in one of four ways. First, the material might be supplied as an issue of initial or subsequent stock from the Education Department. The stock issued in this way fell into one of the following broad categories - furniture, indoor play equipment, puzzles, musical instruments, audiovisual equipment and outdoor play equipment. Second, the materials might be purchased with grant money made available by the Education Department. Third, the materials might be purchased with funds raised by the special units' Parents and Citizen Associations. Finally, community organizations or parents could donate needed materials.

In the interviews the general comments made by the teachers reflected their satisfaction with the quantity of materials and equipment supplied by the Education Department.

- *The equipment provided and the grants given are very generous*
- *Fairly adequately supplied with equipment*

However, all teachers had developed their own materials because they felt that the range of commercially available materials, suitable for use with their clientele, was somewhat limited. A collection of the commercially available materials found useful by the teachers has been listed in Appendix 2. Also included in Appendix 2 is a list of teacher developed and adapted materials.

(d) Issues related to time use

An overriding issue in the use of time was related to the two phases of the Early Educational Intervention Program, as described by the Education Department.

The Early Educational Intervention Program is best seen as consisting of two interrelated phases. First, during infancy and toddlerhood (approximately birth to about three years of age) the program is essentially home based in character. Such a program is worked out through consultation between all concerned but is primarily provided by the parents in the home and family situation. Second, and growing out of the home based phase, is a unit based program for children falling into the typical preschool age range (approximately three years to five or six years of age). In the unit based program the teacher plays an increasing role in the interaction process with the parent assisting in the unit and reinforcing in the home the skills and other behaviours being promoted. Naturally there are considerable differences in the ages that children may move from one phase to the next, as well as differences in the types and content of the programs provided.

An examination of Table 3.7 reveals the distribution of home based, unit based and integrated home and unit based programs in the four units involved in the pilot study.

Table 3.7

Components of programs from four Brisbane Early Educational Intervention Units for 1980 - March, 1981

Unit	Home Based Program	Unit Based Program	Home and Unit Based Program
1	0	14	4
2	2	18	0
3	2	27	0
4	3	26	0

The role of the teacher varied according to the context in which the program was implemented. In the home based programs for infants and toddlers, the teacher directed her efforts to the parents. The teacher in effect became a facilitator, demonstrating to the parents management and handling techniques. Contrasted with this was the role of the teacher in the unit based programs. In these, the teacher directed her efforts to the child, in programs designed to develop specific skills.

The manner in which the teacher organized her weekly timetable would be influenced by the number of children involved in each component of the unit's program. The utilization of time in each unit can be inferred from the weekly timetable. Table 3.1 contains the 1980 weekly timetables for the four units involved in the pilot study. For the units that had a large home based or integrated unit and home based component, greater time allowances needed to be made for home visits. Table 3.7 reveals the clientele numbers in home based programs as compared with those in unit based programs. The smaller numbers in home based programs as compared to unit based programs can be appreciated when the increased time requirements involved in home based programs are considered.

(e) Issues related to the utilization of space

The four units were housed in standard preschool buildings, with an enclosed outside area. The contour of the outside area in units 3 and 4 considerably reduced its suitability for use for play and gross motor activities. The teachers in these two units had to modify their gross motor activities to suit the external environment, or they had to use the play equipment in the grounds of the adjacent preschool. This feature of the external space does place some constraints on the program development and implementation.

The teachers reported that an adequate range of play equipment had been built up at each unit. This equipment included climbing frames, trampolines,swings, slippery slides and sand pits. One difficulty was related to equipment : shortage of adequate storage space. Some of the teachers reported that they had difficulty seeing the full range of equipment when it was in the storage room because of the lack of space.

Figure 3.2 is a diagram of details of the outside area of one of the preschool units. The storage room for the play equipment was accessed through the tilt-a-door, noted on the diagram.

The internal space of each unit was organised into the following areas: a foyer and office area, a kitchen and work area, a toilet area, and an open space that was divided into various activity areas. Figure 3.3 has the floor plans for two of the units.

The building layout had some faults. The following list of teacher comments highlights the areas in which changes were felt to be needed.

- *a need for more withdrawal area*
- *screens to block off quiet areas*
- *more shaded areas outside*

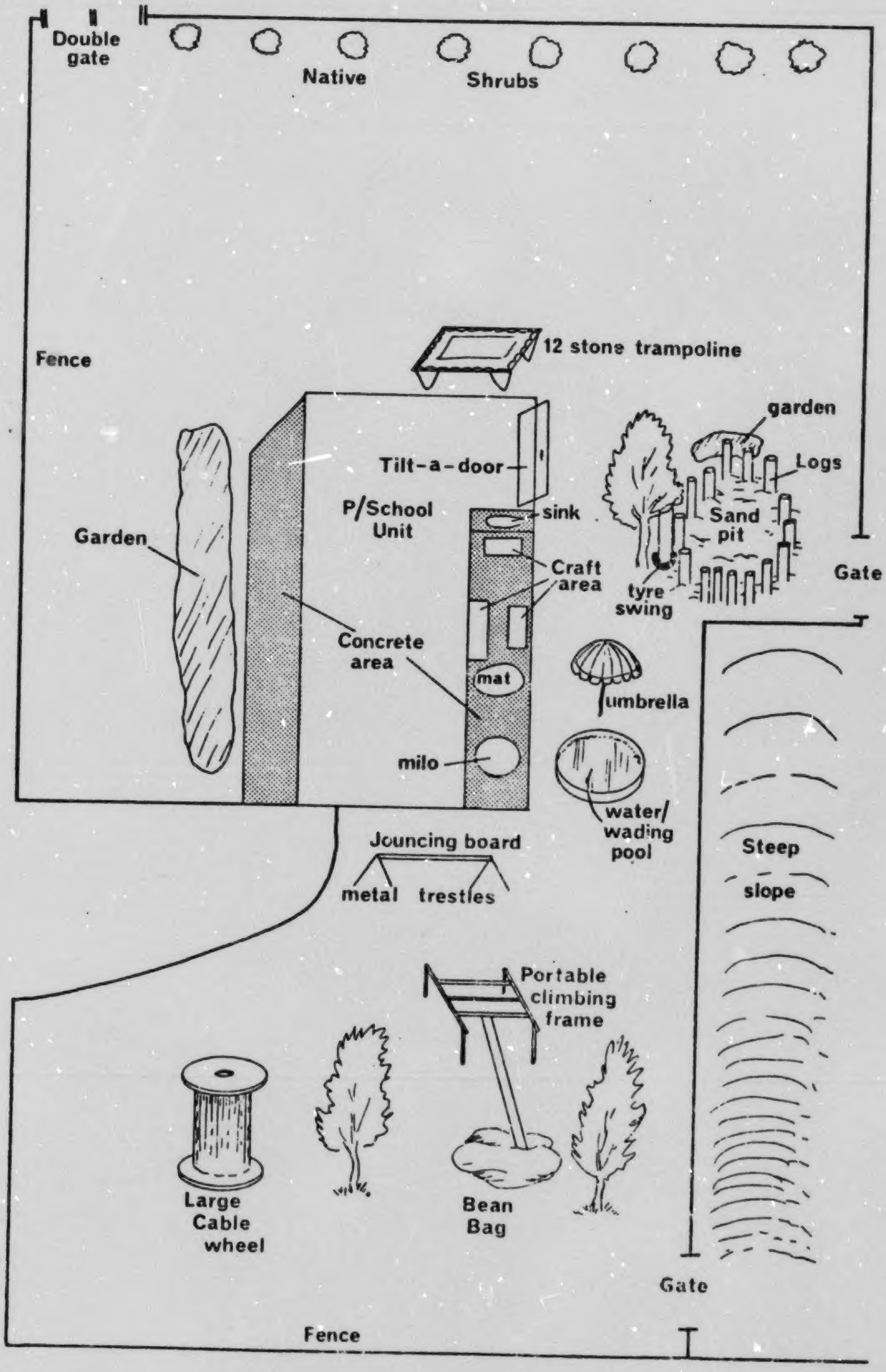

Figure 3.2

Outside activity area for one Special Preschool Unit

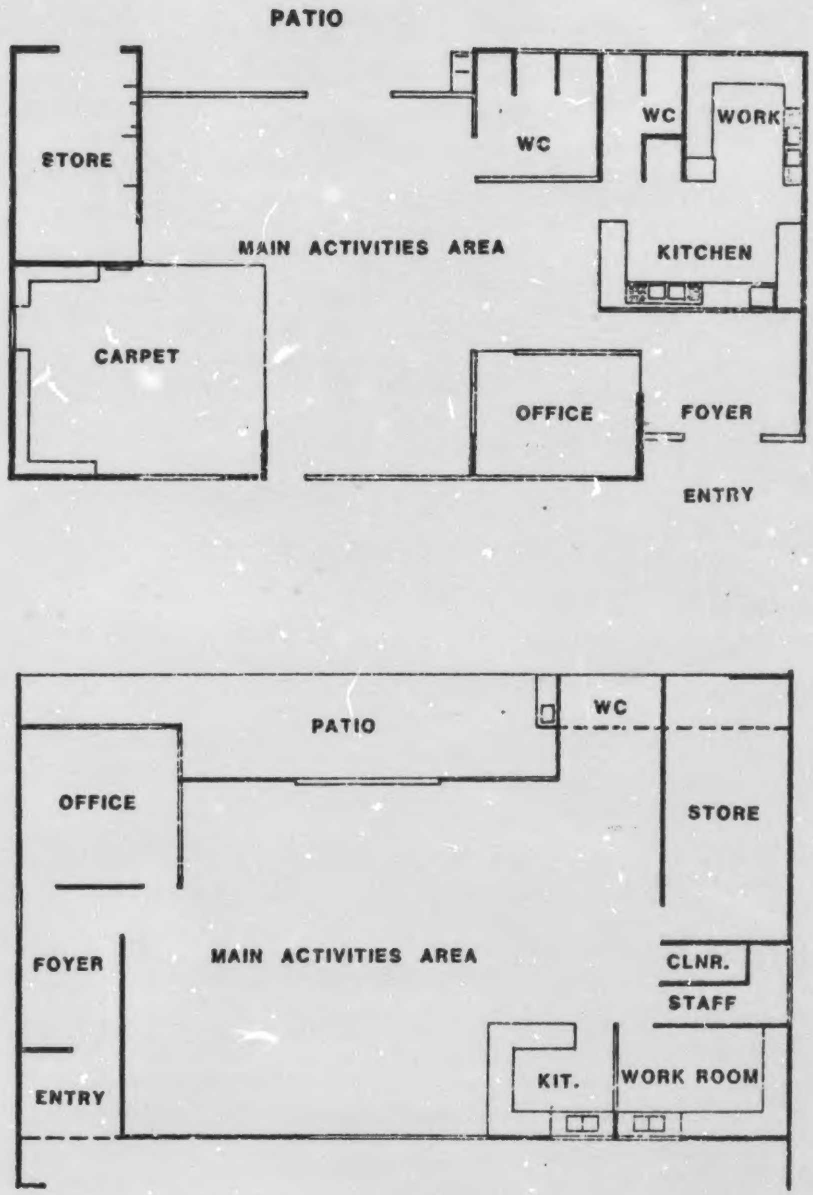

Figure 3.3

Examples of floor plans of Special Preschools

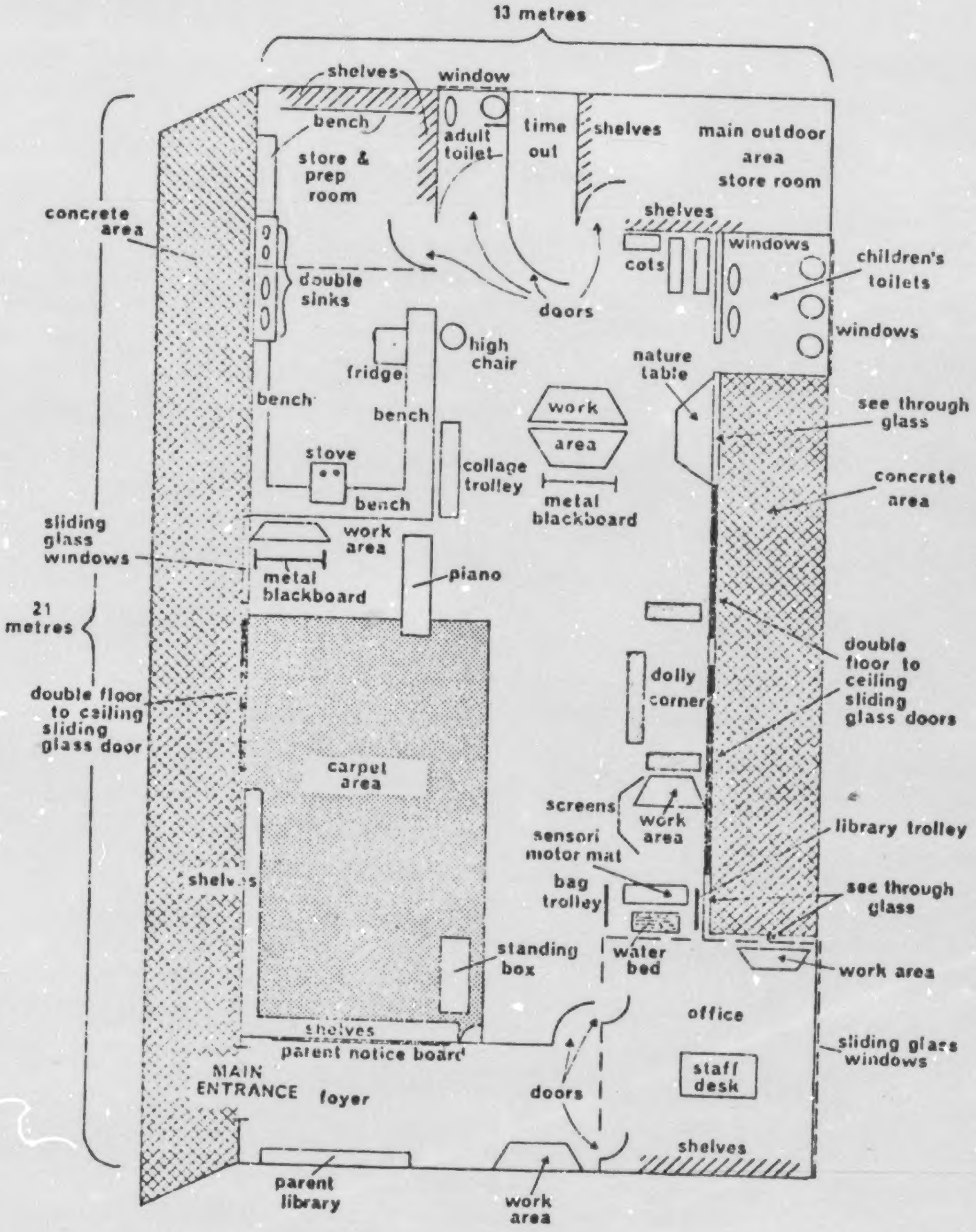

Figure 3.4

Inside activity areas for one Special Preschool Unit

- *a need for more usable areas. A shaded area would help for afternoon activities. The equipment outside gets too hot*
- *more space in inside environment*

The floor plan in figure 3.4 reveals a unit with many different activity areas. The comments from teachers indicated that they feel the need to be able to isolate these areas in some way. If children have difficulty focussing on the activity, the creation of quiet withdrawal areas in which to work would seem to be essential. The remaining problem areas identified by the teachers would all appear to be related to inadequate space. The effectiveness with which a program can be complemented must be affected by these issues related to the amount and suitability of available space.

(f) Issues related to sources of structuring for the program

The teachers in the four units involved in the pilot study completed a table similar to the table in Figure 3.5. The teachers were required to indicate the main sources of structuring for activities in the following areas : physical skills, sensory and perceptual skills, self-help skills, language skills, social interaction skills, attending behaviours, motivation, creativity and problem-solving. From the completed tables the information in Figure 3.5 was organized.

Figure 3.5

Major sources of structuring in program development

	NUMBER OF RESPONSES IN EACH AREA			
Areas in Program	Materials & Equipment	Building Layout	Teacher Direction	Peer Group Interaction
1. Physical skills	8	8	8	6
2. Sensory & Perceptual Skills	8	3	8	2
3. Self-Help Skills	5	3	8	7
4. Language Skills	6	2	8	7
5. Social Interaction	4	2	7	8

Figure 3.5 (cont'd)

Areas in Program	NUMBER OF RESPONSES IN EACH AREA			
	Materials & Equipment	Building Layout	Teacher Direction	Peer Group Interaction
6. Attending behaviours	6	6	8	3
7. Motivation	7	2	8	7
8. Creativity and Problem Solving	7	2	6	5

The categories in the above figure are not mutually exclusive.

The teachers indicated that the most important source of structuring for the areas of physical skills, sensory and perceptual skills and creativity and problem solving were the materials and equipment available and teacher direction. The major sources of structuring for self-help skills, language skills and social interaction were indicated as teacher direction and peer group interaction. For attending behaviours, primary emphasis was given to materials and equipment available, building layout and teacher direction as major sources of structuring for program development. Finally, for the motivation aspects in program development, relative emphasis was given to materials and equipment, teacher direction and peer group interaction as sources of program structuring.

The central importance of materials and human resources as sources of structuring in program development are clearly apparent.

Parents responded to two questionnaires. The first questionnaire was completed in 1979 and the second in 1981. A similar questionnaire was used in both instances. Parental opinion about various aspects of the program in which their children were involved was gathered from these questionnaires.

The teachers in the Early Educational Intervention units were closely involved with parents, in both the home based and unit based programs. Parent opinion about program effectiveness was therefore an important consideration. In Table 3.8 parent opinion about the helpfulness of the program for the child, has been analysed. The total percentage of parents who felt the child's program had been extremely or fairly helpful was 89% for the population enrolled during 1979 (see Table 3.8), and 92% for the population currently enrolled (see Table 3.8). These percentages reflect, over the total population, a high degree of parental satisfaction with the programs. A breakdown of parental response across the four units for each of the two years revealed the following information: the percentage of parents who felt the program was extremely or fairly helpful, for the population enrolled in 1979, was 93% for unit 1, 100% for unit 2, 90% for unit 3 and 75% for unit 4. For the children currently enrolled, the percentage of parents who felt the program was extremely or fairly helpful was 92% for unit 1, 90% for unit 2, 95% for unit 3 and 94% for unit 4. These differences across the four units reflect differing parental acceptance of, and satisfaction with, the programs operating in the units. The changing composition of staff in the units over the three year period may be a factor that has influenced the pattern of results obtained.

Table 3.9 analyses the parents'opinions about the changes in the child's behaviour at home. The total percentage of parents who felt there had been many, or a few, changes in their child's behaviour at home since being involved in the program was 88% for the population enrolled in 1979 and 89% for the currently enrolled population. There is a correspondence between these total percentages and the total percentages for Table 3.8. This correspondence is to be expected. If parents report changes in the child's behaviour at home, they may be likely to attribute these changes, in part, to the effectiveness of the program in which the child is enrolled.

Table 3.10 is an analysis of specific changes in the child that the parents have noticed. This information was collected from the second questionnaire only, so there is no information for the population enrolled in 1979. The rankings for the currently enrolled group, from area of greatest change to area of least change, is: language/speech, overall change, social skills, behavioural skills, motor skills and self-help skills. The rankings allocated to these areas of change, by the parents, is a reflection of the characteristics of the population of the units. The area of greatest disability will be the focus of the child's program and consequently should be the area in which greatest change can be observed.

Table 3.11 analyses the information on the ways in which the program has helped the parents. This information was obtained from the second questionnaire only, so there is no information for the population enrolled in 1979. For the currently enrolled group, the rankings from most to least help were: helped to show parents how to help child, relieved some worries, acquainted parent with other parents in similar situations,and helped the family understand and deal with the child.

Parents typically reported learning specific tasks to teach their children, but not the general principles required to cope with and manage their handicapped children across the broad range of everyday situations they encountered. At the same time, teachers expressed a concern about the limited extent to which they were able to assist parents with these more general problems.

3.4 Concluding Summary

The preceding discussion has indicated the range of factors that have influenced the process of program development, the diversity of their formats and modes of implementation. The variations in programs over time underscored the dynamic nature of all educational programs. In any discussion of early intervention, it must be stressed that the programs produced should be seen as dynamic entities evolving in response to changes in the context of program development and implementation, and the beliefs, assumptions and knowledge of those developing and implementing the programs.

It is also clear that to date the programs have been generally well received by the parents of children attending the special preschools.

The further evolution of programs in the Queensland context will be facilitated by discussion of some of the difficulties encountered by the teachers in the pilot early educational intervention programs: difficulties related to the definition and bounds of the teacher role, their preparation for work in the field of early intervention and the limited involvement of support staff in the processes of program development and implementation. The need for greater involvement of support staff from other relevant disciplines was clearly enunciated by all of the teachers. The next chapter examines the pattern of involvement of support staff in detail.

Table 3.8

Helpfulness of program for the child

	Unit									
Degree of helpfulness	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Enrolled (1979)										
Extremely	8	*53*	12	*75*	11	*55*	7	*35*	38	*54*
Fairly	6	*40*	4	*25*	7	*35*	8	*40*	25	*35*
Slightly	1	*7*	0	-	2	*10*	4	*20*	7	*10*
Not at all	0	-	0	-	0	-	1	*5*	1	*1*
Total	15		16		20		20		71	
Previously Enrolled (1981)										
Extremely	6	*67*	7	*54*	2	*25*	8	*50*	23	*50*
Fairly	3	*33*	5	*39*	5	*63*	3	*19*	16	*35*
Slightly	0	-	1	*8*	1	*13*	2	*13*	4	*9*
Not at all	0	-	0	-	0	-	3	*19*	3	*7*
Total	9		13		8		16		46	
Currently Enrolled (1981)										
Extremely	9	*75*	5	*45*	12	*71*	10	*67*	36	*65*
Fairly	2	*17*	5	*45*	4	*24*	4	*27*	15	*27*
Slightly	0	-	1	*9*	1	*6*	1	*6*	3	*5*
Not at all	1	*8*	0	-	0	-	0	-	1	*2*
Total	12		11		17		15		55	

Table 3.9

Changes in child's behaviour at home since program

	Unit									
Frequency of changes	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Enrolled (1979)										
Many	8	*53*	10	*63*	9	*45*	6	*30*	33	*46*
Few	5	*33*	6	*38*	11	*55*	8	*40*	30	*42*
None	2	*13*	0	-	0	-	6	*30*	8	*11*
Total	15		16		20		20		71	
Previously Enrolled (1981)										
Many	4	*44*	8	*62*	3	*38*	6	*38*	21	*46*
Few	5	*56*	5	*39*	3	*38*	8	*50*	21	*46*
None	0	-	0	-	2	*25*	2	*13*	4	*9*
Total	9		13		8		16		46	
Currently Enrolled (1981)										
Many	7	*58*	4	*36*	10	*59*	11	*73*	32	*58*
Few	4	*33*	5	*45*	5	*24*	3	*20*	17	*31*
None	1	*8*	2	*18*	2	*12*	1	*7*	6	*11*
Total	12		11		17		15		55	

Table 3.10

Changes in the child that the parents have noticed

	Unit									
	1		2		3		4		Total	
Changes	N	Ranking	N	Ranking	N	Ranking	N	Ranking	N	Ranking
Previously Enrolled (1981)										
Overall	3	*1*	5	*4*	3	*4*	7	*2*	18	*3*
Language/speech	3	*1*	10	*1*	5	*1*	7	*2*	25	*1*
Motor skills	3	*1*	9	*2*	4	*2*	5	*4*	21	*2*
Social skills	0	-	6	*3*	4	*2*	8	*1*	18	*3*
Self-help skills	1	*5*	4	*5*	2	*6*	4	*5*	11	*6*
Behavioural	3	*1*	3	*6*	3	*4*	4	*5*	13	*5*
Currently Enrolled (1981)										
Overall	4	*4*	5	*2*	9	*2*	9	*2*	27	*2*
Language/speech	6	*1*	6	*1*	10	*1*	8	*3*	30	*1*
Motor skills	3	*5*	3	*4*	8	*3*	6	*5*	20	*4*
Social skills	3	*5*	4	*3*	8	*3*	10	*1*	25	*3*
Self-help skills	5	*3*	2	*5*	4	*6*	5	*6*	16	*6*
Behavioural	6	*1*	2	*5*	5	*5*	7	*4*	20	*4*

Table 3.11

Ways in which the program has helped the parents(1)

Ways program has helped	Unit 1 N	Unit 1 Ranking	Unit 2 N	Unit 2 Ranking	Unit 3 N	Unit 3 Ranking	Unit 4 N	Unit 4 Ranking	Total N	Total Ranking
Previously Enrolled (1981)										
Relieved some worries	5	*1*	5	*3*	2	*3*	5	*3*	17	*3*
Helped to show parent how to help child	4	*2*	7	*2*	5	*1*	8	*1*	24	*1*
Helped family understand and deal with child	3	*3*	5	*3*	2	*3*	3	*4*	13	*4*
Acquainted parent with other parents in similar situations	2	*4*	9	*1*	4	*2*	8	*1*	23	*2*
Currently Enrolled (1981)										
Relieved some worries	5	*2*	3	*4*	8	*2*	10	*1*	26	*2*
Helped to show parent how to help child	10	*1*	7	*1*	12	*1*	4	*3*	33	*1*
Helped family understand and deal with child	3	*3*	4	*3*	7	*3*	3	*4*	17	*4*
Acquainted parent with other parents in similar situations	2	*4*	7	*1*	7	*3*	8	*2*	24	*3*

(1) Note that only one parent of currently enrolled children did not think that the program had helped, while four parents of children previously enrolled believed the program had not helped them.

CHAPTER 4

SUPPORT SERVICES

Support, both direct and indirect, to the teachers and parents of the children in the special preschool units came from a number of sources and disciplines.

4.1 Data Collection

Data on the delivery of support services to the four units were collected through: interviews with the deliverers (independently and in group meetings), questionnaires to the deliverers, meetings with representatives of the disciplines (independently and in multi-disciplinary meetings), positional statements of the disciplines involved, and observation by team members. Information was also obtained from the receivers of the support services - the teachers and parents - via meetings and questionnaires.

The disciplines varied in the degree and depth of involvement as a result of many factors including availability and case loads of personnel, philosophy and work preference of individual specialists, the children's and teachers' needs, parent requirements, and professional relationships. The collated information presents a description of the support services which were provided, the perceived roles of the disciplines represented, and the consumers' views of the services they received.

The disciplines' views of the development of their services in the future, in both likely and optimal circumstances, are reported in full in a separate volume obtainable on request.

4.2 Guidance Officers

Guidance officers formed a consistent part of the early intervention team. Their services were made available as a part of their routine duties by the Division of Guidance and Special Education.

The guidance officers varied in their training, experience and philosophies. The differing needs of the children, parents and teachers increased the complexity and contributed to the variability of the practice each guidance officer developed, although some common features emerged. The staff changed during the course of the project, and this further contributed to the variation in modes of guidance service delivery.

4.2.1 The multi-faceted role of the guidance officer. Counselling emerged as a primary service to both parents and teachers. Guidance officers advised parents on realistic goals for their child and helped with management and placement problems. They provided major support for the teachers, being used frequently by the latter in crisis situations.

Most guidance officers stated that they had limited time available for assessment, preferring ongoing teacher observation and assessment. Formal testing was undertaken predominantly for informing placement decisions following early intervention. Thus, little information from guidance officers was used in program and curriculum planning, and the amount of assessment information available on children varied greatly, as Chapter 2 indicated.

The consultant role emerged on two levels - for particular children and for the unit as a whole. In the latter case, guidance officers were used as an information resource for teachers and parents. With particular children they undertook periodic observation and assessment. They also acted as consultants both to other agencies and to the parents throughout the process of placement of children following their time in early intervention.

The guidance officers also acted as co-ordinators, liaising with other professionals and agencies, marshalling records, and handling practical problems such as the organization of transport for children requiring special arrangements.

4.2.2 Comparative allocation of guidance officer time. The guidance officers were requested to keep a detailed time budget in 10 minute intervals for two working weeks (from May 11, 1981), the results of which are reported in Tables 4.1 and 4.2.(1)

Table 4.1

Comparative allocation of guidance officer time to early intervention and to other duties. (10 min. intervals in two working weeks).

Unit	Early Intervention	Outside	% in Early Intervention
1	95	Not documented	-
2	60	420	12.5
3	50	432	10.4
4	93	424	18.0

---

(1) A more general time budget was completed in 1980. The more detailed time budgets for 1981 provided a clearer picture of the guidance officers' functioning and have been used in preference to the 1980 data.

Table 4.2

Comparative allocation of guidance officer time in early intervention by function (10 min. intervals during two working weeks)

	Unit					
Function	1	2	3	4	Total	%
Preparation	4	0	3	8	15	5.0
Interviews	9	0	7	2	18	6.0
Assessments	0	4	0	6	10	3.4
Observations	9	13	8	2	32	10.7
Teacher Consultations	9	10	2	9	30	10.1
Parent Consultations	6	3	3	0	12	4.0
Parent Counselling	3	2	0	12	17	5.7
Phone Calls	19	10	4	12	45	15.1
File Compilation/ Additions	3	13	0	6	22	7.4
Reports	3	5	6	0	14	4.7
Other Consultations	2	0	9	11	22	7.4
Regional guidance administration	11	0	0	0	11	3.7
Placements	5	0	2	0	7	2.3
Travelling	9	0	0	10	19	6.4
Other	3	0	6	15	24	8.1
Total	95	60	50	93	298	100.0

The guidance officers allocated around 10-18% of their available time to the special preschool units. Of this, about 15% was spent on non-specified telephone calls, 11% observing, and 10% counselling teachers. Little time was reported to be spent on assessment, placement and parent consultations. Additional counselling and other support activities could have been offered during the unspecified telephone time. However, the emphasis would be expected to change towards the end of the year, given the guidance officers' views of their role in assessing for placement.

4.2.3 The guidance officers' service viewed by its consumers. The teachers used the services of the guidance officers in two main areas - in counselling parents, particularly in times of crisis, and for help with the management of behaviour problems. Support, planning, counselling and co-ordination were other valued roles.

The teachers expressed a need for increased access to guidance services to enable more regular discussion of issues of common concern, and to provide information on resources available to the teachers. All teachers expressed a need for complete assessments of the children in order to improve individual program planning. This conflicts with the guidance officers' views that teacher assessment provided this information.

Parent opinions of guidance services were not specifically sought, but the extent and type of contact were investigated. Over 40% reported no contact with a guidance officer, 18% had informal contact and the rest contacted guidance officers formally by appointment. (Table 4.3).

4.3 Medical Officers

Medical help and advice to the children, parents and teachers in the units appeared to be provided from three sources: the Division of School Health of the Department of Health, other salaried medical practitioners (such as hospital, community health or university specialists and medical officers), and private practitioners.

4.3.1 Division of School Health Services. Each of the four units was served by a single school medical officer. The school medical officers acted primarily as consultants to parents and teachers, advising on the medical aspects of the child's handicap. Liaison with other medical specialists was an important feature of the school medical officer's work, both to obtain information for parents and teachers, and to relay information back to the medical practitioners. Medical assessment was seen to be a secondary role, with some screening of vision and hearing, and occasionally complete physical examination if this had not been undertaken previously. Involvement to date has been predominantly bi-disciplinary (between the medical and educational personnel) and has been limited by the time available - generally involving a maximum of 10-12 days per year spent on visiting

Table 4.3

Parental arrangements to talk to guidance officers

	Unit									
Arrangements	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
					Enrolled (1979)					
Informal	4	*27*	8	*50*	3	*15*	2	*10*	17	*24*
Appointment	5	*33*	4	*25*	9	*45*	10	*50*	28	*34*
No contact	6	*40*	4	*25*	8	*40*	8	*40*	26	*37*
Total	15		16		20		20		71	
					Previously Enrolled (1981) (1)					
Informal	2	*22*	4	*31*	1	*13*	3	*20*	10	*22*
Appointment	2	*22*	2	*15*	6	*75*	8	*53*	18	*40*
No contact	5	*56*	7	*54*	1	*13*	4	*27*	17	*38*
Total	9		13		8		15		45	
					Currently Enrolled (1981)					
Informal	3	*25*	1	*9*	1	*6*	0	-	5	*9*
Appointment	4	*33*	5	*45*	7	*41*	6	*40*	22	*40*
No contact	5	*42*	5	*45*	9	*53*	9	*60*	28	*51*
Total	12		11		17		15		55	

(1) One observation is missing

the units. The school medical officers had little input into the curriculum except to the extent that they advised the teachers of the specific medical limitations of a condition and its implications for program implementation.

The school medical officers felt it desirable that they be included at the initial admission interviews in order to collect information, initiate discussion and assess the appropriateness of the placement from a medical viewpoint. School medical officers felt their role should include:

(a) *a resource role to teachers in providing explanations and the implications of the medical conditions of children attending the program;*

(b) *a resource role to parents in providing explanations of their child's medical condition with amplification where necessary of information given to them by their primary care medical personnel;*

(c) *a clinical assessment role to exclude correctable or modifiable medical causes of developmental retardation; included in this area was the routine exclusion of vision and hearing defects. It was considered that such assessment should be performed at regular intervals throughout the child's attendance at the program;*

(d) *a liaison role with primary care medical professionals resulting in feedback of relevant medical information to teaching staff when this was felt to be significant for the school program for the child;*

(e) *an availability for discussion with groups of parents on basic health topics, e.g. nutrition, immunization;*

(f) *an information dissemination role in providing publicity on the early intervention programs to community medical professionals so that the maximum number of children in need of the program could be reached, and facilitating an understanding of the role of the early educational intervention program within the community;*

(g) *an assessment role in deciding the appropriateness of placement in the early intervention program from a medical viewpoint.*

4.3.2 Salaried or sessional specialists and medical officers. Two specialist paediatricians provided medical information and support to one unit with severely disabled children, as well as assessing some referred children. They considered that the paediatrician's involvement in early intervention should include diagnosis and assessment to identify physical, neurological and primary emotional problems, and consideration of the aetiology, genetic implications, epidemiology and prognosis. Counselling the family on the medical aspects of the problems, including management of behavioural disorders, was felt to be an important role. The need for a co-ordinated approach to children with disabilities, with the paediatrician as one member of a team, was also suggested, and it was pointed out that in many countries the medical officer carries the legal responsibility for any treatment initiated by this team.

Liaison with general practitioners and other medical officers was viewed as another aspect of the paediatrician's co-ordinating role. Monitoring of the medical progress of the child and supervision of the medical aspects of aetiology were stressed. A need was seen to utilize a paediatrician's knowledge of the child's abilities/disabilities to facilitate program monitoring and inform program development. They also saw paediatricians functioning as a source of information on medical conditions and medication for the program staff.

These functions, except paediatric assessment and some monitoring, were also outlined by the Division of School Health as functions for its officers.

Specialists and medical officers from other agencies and departments (such as the Division of Community Medicine) were indirectly involved with the units through routine service to clients, particularly in assessment. Because of the ad hoc nature of the involvement and the indirectness of the service, no estimation of the time commitment was obtained from any of these medical officers.

4.3.3 Private practitioners. Medical practitioners are one of the first points of contact for children with disabilities. Many children in the programs were in the care of private paediatricians, other specialists, and general practitioners. In general, private practitioners were involved with the programs only as a result of a specific request for information from the school medical officer. The school medical officers reported a very satisfactory response to such requests in the main.

Table 4.4

Parental arrangements to talk to school medical officer

	Unit									
Arrangements	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Enrolled (1979)										
Informal	2	*13*	1	*6*	0	-	1	*5*	4	*6*
Appointment	0	-	3	*19*	2	*10*	1	*5*	6	*8*
No contact	13	*87*	12	*75*	18	*90*	18	*90*	61	*86*
Total	15		16		20		20		71	
Previously Enrolled (1981) (1)										
Informal	2	*22*	0	-	0	-	2	*13*	4	*9*
Appointment	1	*11*	4	*31*	2	*25*	3	*20*	10	*22*
No contact	6	*67*	9	*69*	6	*75*	10	*67*	31	*69*
Total	9		13		8		15		45	
Currently Enrolled (1981)										
Informal	3	*25*	0	-	2	*12*	1	*7*	6	*11*
Appointment	7	*58*	8	*73*	6	*35*	2	*13*	23	*42*
No contact	2	*17*	3	*27*	9	*53*	12	*80*	26	*47*
Total	12		11		17		15		55	

(1) One observation is missing

Table 4.5

Unmet needs as perceived by parents

	Unit									
	1		2		3		4		Total	
Unmet Needs	N	Ranking	N	Ranking	N	Ranking	N	Ranking	N	Ranking
Previously Enrolled (1981)										
More support from therapists	4	1	9	1	6	1	12	1	31	1
Medical services	0	-	0	-	0	-	1	5	1	6
Emotional support	0	-	2	4	0	-	7	3	9	3
More individualised time with teacher/therapist	3	2	9	1	6	1	10	2	28	2
Toy library facilities	1	4	5	3	1	4	2	4	9	3
Finance for equipment/ facilities	3	2	0	-	3	3	1	5	7	5
Currently Enrolled (1981)										
More support from therapists	1	3	7	1	11	1	9	1	28	1
Medical services	0	-	2	3	0	-	1	5	3	6
Emotional support	1	3	2	3	5	3	2	4	10	4
More individualised time with teacher/therapist	4	1	5	2	9	2	9	1	27	2
Toy library facilities	1	3	0	-	2	5	1	5	4	5
Finance for equipment/ facilities	2	2	1	5	5	3	5	3	13	3

Table 4.6

Parents'greatest worries about their children

Parents' worries	Unit 1		2		3		4		Total	
	N	Ranking	N	Ranking	N	Ranking	N	Ranking	N	Rank ing
Previously Enrolled (1981)										
No proper diagnosis	0	-	1	6	0	-	3	6	4	8
Need for constant care	2	3	1	6	0	-	3	6	6	6
Lack of self-help skills	1	5	0	-	2	5	3	6	6	6
Poor speech development	4	1	4	3	4	1	5	4	17	2
Inability to develop social skills	1	5	3	4	1	6	5	4	10	5
Types of schooling offered	4	1	8	1	4	1	10	1	26	1
Employment opportunities	1	5	5	2	3	3	7	3	16	3
Future placement	2	3	2	5	3	3	9	2	16	3
Currently Enrolled (1981)										
No proper diagnosis	0	-	1	6	5	5	2	5	8	7
Need for constant care	1	6	2	5	3	8	1	8	7	8
Lack of self-help skills	1	6	1	6	4	7	3	4	9	6
Poor speech development	4	2	5	2	6	3	9	2	24	2
Inability to develop social skills	2	4	0	-	6	3	2	5	10	5
Types of schooling offered	6	1	7	1	14	1	10	1	37	1
Employment opportunities	4	2	5	2	5	5	2	5	16	4
Future placement	2	4	3	4	8	2	5	3	18	3

4.3.4 The consumer view of the medical services. The teachers regarded the liaison/information service (especially with other medical practitioners) and the counselling roles (particularly to parents on the medical aspects) as the school medical officers' most useful contribution. However, the teachers would have appreciated a greater allocation of school medical officer time to early intervention.

Some 67% of parents reported no contact with school medical officers, but the position seemed to improve during the second year of the program (Table 4.4). Although parents expressed grave concern about medical issues generally (NWAC; Access '81) (1) evaluation of "help needed" (Table 4.5) and "parents' greatest concerns" (Table 4.6), indicated that medical diagnosis and services in the educational setting of early intervention ranked low as parent concerns.

4.4 Speech Therapy

Most children in the special preschool units had some degree of language and communication disorder, either specifically or as a feature of general developmental delay (Table 2.1).

4.4.1 Involvement. Speech therapists employed by the Department of Education worked in at least two of the units on average for less than one day per week. Other agencies or private practitioners also delivered speech therapy services to many of the children. In 1981, at least 53% of the children received speech therapy (Table 4.7), 71% of these attending at least once per week (Table 4.8). It should be noted that 5% received speech therapy from multiple sources (Table 4.7). Only 4% of the sample reported contact with audiological services (Table 4.7).

Table 4.7

Outside services : parents' reports of other programs delivering particular services to children (currently enrolled 1981)

	No Service		1 Agency		2 Agencies		3 Agencies	
	N	%	N	%	N	%	N	%
Physiotherapy	41	74.5	11	20.0	2	3.6	1	1.8
Speech therapy	26	47.3	26	47.3	2	3.6	1	1.8
Occupational therapy	40	72.7	11	20.0	3	5.5	1	1.8
Audiological	53	96.4	2	3.6	0	0	0	0

---

(1) National Women's Advisory Council Report, 1980; Queensland Committee for Parents of the Disabled, 1981.

Table 4.8

Outside services: parents' reports of frequency of service (currently enrolled 1981)

	Weekly		Fortnightly		Monthly		Periodically	
	N	%	N	%	N	%	N	%
Physiotherapy	4	25	4	25	8	50	-	-
Speech Therapy	20	71	2	7	6	21	-	-
Occupational Therapy	11	61	1	6	5	28	1	6
Medical	-	-	-	-	3	60	2	40
Audiological	2	66	-	-	1	33	-	-

4.4.2 Role. Speech therapists see their role as the assessment, diagnosis and appropriate management of children with communication handicaps, aiming for each child to communicate to the best of his/her ability within the limitations of his handicap. The speech therapists reported that they are trained to :

(a) *diagnose speech, voice, fluency and language disorders and delays;*

(b) *devise programs for such problems;*

(c) *provide consultative input on all areas; and*

(d) *carry out, or monitor, treatment in the areas of disordered articulation, feeding, oro-motor stimulation, auditory perceptual training. With better teacher education, it was felt that teachers could assume more responsibility for some aspects of language assessment and programming requiring less specialized training.*

The speech therapists have worked in a variety of ways in the units, by withdrawing the child, by working in parallel with the teachers, and as consultant. They regarded the most effective method as that where teacher/therapist programs are closely integrated. Teachers and parents are relied upon for follow-up of individual and group therapy, as well as implementation of the advice given in consultation.

4.4.3 Consumer view. The teachers expected more support than they received from consultants in all of the therapies in program planning, counselling, assessment and resources. They recognized the problems of multiple services, as did the therapists but pointed to the need for more time to interact with consultants. As the programs developed, some units have received better support.

Poor speech development ranked high in parental worries about their child (Table 4.6). Nationally, mothers also regard speech and communication problems as areas lacking adequate services (NWAC report, 1980). The majority of parents (71%) whose children received speech therapy services reported that the service was extremely helpful (Table 4.9).

Table 4.9

Outside services : parents' assessment of services
(currently enrolled 1981)

Service	Extremely helpful		Fairly helpful		Slightly helpful		Not helpful	
	N	%	N	%	N	%	N	%
Physiotherapy	9	*56*	6	*38*	1	*6*	0	-
Speech therapy	20	*71*	6	*21*	2	*8*	0	-
Occupational therapy	9	*50*	8	*44*	1	*6*	0	-
Medical	3	*50*	3	*50*	0	-	0	-
Audiological	1	*33*	0	-	1	*33*	1	*33*

Lack of therapy help was the highest ranking parental concern (Table 4.5). Parent reports from each special preschool stressed the need for specialist therapists to be attached in some form to the units. Special emphasis was placed on physiotherapy and speech therapy services. Parents also suggested that such services should be available not only to the staff, but also to parents, particularly via follow-up home visits. (Parent document). Parents also wanted more individual time with teacher/therapist (Table 4.5). Predominantly, parents had informal contact with therapists (Table 4.10).

4.5 Physiotherapy

Physical disabilities were not a major primary disability in the special preschools, as indicated in Table 2.1. Many of the other groups of children however required physiotherapy service. The lack of therapy support emerged as a major concern of parents and of teachers (4.4.3).

Table 4.10

Parental arrangements to talk to therapists

	Unit									
Arrangements	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
					Enrolled (1979)					
Informal	9	60	9	56	5	25	9	45	32	45
Appointment	3	20	2	13	9	45	4	20	18	25
No contact	3	20	5	31	6	30	7	35	21	30
Total	15		16		20		20		71	
					Previously Enrolled (1981)(1)					
Informal	5	56	4	31	2	25	6	40	17	38
Appointment	2	22	4	31	3	38	3	20	12	27
No contact	2	22	5	39	3	38	6	40	16	36
Total	9		13		8		15		45	
					Currently Enrolled (1981)					
Informal	5	42	2	18	10	59	5	33	22	40
Appointment	5	42	5	45	4	24	1	7	15	27
No contact	2	16	4	36	3	18	9	60	18	33
Total	12		11		17		15		55	

(1) One observation is missing

4.5.1 Involvement. Only 25% of children in the 1981 sample were receiving physiotherapy, although 5% received services from multiple sources (Table 4.7). Moreover, this input was not always very intensive as 50% of those receiving physiotherapy reported only monthly contact and 25% fortnightly contact (Table 4.8).

Physiotherapists were employed by the Department of Health, and were not available to service the special preschools directly. Some physiotherapy services were available indirectly to the units through the children's involvement with other agencies, such as the Central Assessment Clinic of the Division of Community Medicine, or with private practitioners. Two physiotherapists who were members of the monitoring team had some consultative input (see 4.9 below).

4.5.2 Role. Physiotherapists submitted that they should work with children and parents by -

- *providing full neuro-developmental assessment of all children who had not been assessed recently by another agency or physiotherapist;*
- *screening of all children referred, to provide information concerning:*
    - *(i) suitability for placement in early educational intervention or other program*
    - *(ii) adequate basic data regarding sensory and motor function and performance*
    - *(iii) most suitable program while attending early educational intervention program*
- *when necessary, teaching parents a home program if the children were not within any other physiotherapy program;*
- *identifying and contacting relevant physiotherapists who are treating children apart from the early educational intervention program, regarding the program they would like to be included during early educational intervention and supporting the implementation of this program;*

- *advising on handling, positioning, use of equipment, the amount and type of sensory-motor stimulation and the level of expected motor performance;*
- *providing information, advice and support regarding motor dysfunction or handicap, normal sensory and motor development to any or all other persons involved in the management and care of the child.*

4.5.3 Consumer view. The teachers all requested that physiotherapy services be available directly to the units, prererably through the Education Department or through greater co-operation between the Departments of Health and Education. They desired a combination of consultative input as well as a transdisciplinary program implementation and did not need excessive "hands on" therapy. There was concern that the units should not become clinics.

Although parents were satisfied with the service they were actually receiving (56% finding it extremely helpful and 38% fairly helpful; Table 4.9), the lack of therapy help was the highest ranking parental concern (Table 4.5) as outlined in 4.4.3. This concern has also been reflected nationally. Parents urgently required adequate therapy support to be provided for their children in the child's educational setting (NWAC report, 1980).

4.6 Occupational Therapy

As the issues raised in 4.5 also apply to the involvement of occupational therapists, only information specific to occupational therapy services is discussed in this section.

4.6.1 Involvement. In 1979 one visiting teacher, in addition to her teaching qualifications, was a qualified occupational therapist. Overall, 27% of children were seen by occupational therapists, and 7% by more than one service (Table 4.7). Occupational therapy services were more intensive than physiotherapy services, with 61% of children seen at least once per week , and only 28% monthly (Table 4.8).

4.6.2 Role. Occupational therapists submitted that their role could be:

- *developmental screening*
- *individual assessment on areas of developmental levels, perceptual, sensory-motor and fine motor skills*

- *programming advice to teachers following individual assessment*
- *advice to teachers on physical handling, dressing and feeding techniques, equipment and so on*
- *assessment of severely disabled children requiring aids*
- *parental advice and support, and home visits.*

4.6.3 Consumer view. Occupational therapy services, when available, were viewed by the teachers and parents as being valuable. Some 50% of parents reported that the occupational therapy they were receiving was extremely helpful and 44% fairly helpful (Table 4.9).

4.7 Social Work

The social workers submitted that the greatest resource for learning and development of the young disabled child is the home environment, including family relationships. It was felt that the teachers should be aware of the importance of family dynamics and the place of the family in the community. In turn, teachers, speech therapists, and parents, regretted the lack of social work involvement in the special preschools.

4.7.1 Involvement. Social work contact by professionals attached to other agencies occurred in a limited number of instances and on an irregular basis.

4.7.2 Role. The social workers suggested that they could be directly involved in early intervention in order to :

- *counsel the parents at time of diagnosis; help parents accept their responsibilities; and provide ongoing support;*
- *provide information on services available;*
- *balance the needs of the whole family;*
- *serve as advocate in relationship problems between parent and preschool;*
- *encourage involvement in local community.*

4.7.3 Consumer view. One of the teachers' primary requests was for help with counselling.

Parents nationally were also concerned at the lack of accessible, sensitive counselling, the lack of information regarding services, and the effect on the whole family of a disabled child (NWAC report, 1980), issues for which it was thought social workers should take responsibility.

4.8 Summary of Support Professionals' Views

In summary, the perceived roles of the professionals offering support to the special preschools, presented in Table 4.11, indicated that most disciplines wanted to diagnose problems in their areas of expertise. All disciplines suggested consultancy in these areas as a means of delivering service. Counselling, a service requested by both teachers and parents, was suggested by guidance officers, social workers and medical officers. Guidance officers and social workers saw a role for their profession in the overall co-ordination of the range of professional services, information resources and assessment data. Medical officers and physiotherapists suggested a more limited co-ordinating role, restricted to liaison within their own professions.

All professions stressed the importance of a team approach; the issues involved in the effective functioning of multidisciplinary, interdisciplinary or transdisciplinary approaches will be discussed below (6.3.2).

The urgent need for the rationalisation of services between agencies was uniformly recognised. Adoption of the principle of a designated person to act as case co-ordinator was proposed. The need for improved co-ordination at all levels, particularly among government departments, was emphasised. Other aspects of co-ordination required included an integrated referral procedure and more efficient team interaction.

Better communication between parents and professionals, as well as among professionals, was seen to be imperative. The latter could be encouraged by either sharing core skills in pre-service and in-service training of all professionals, or clear delineation of the role and goals of each of the professions involved in service delivery. Formal and informal communication networks clearly need to be established at all levels. This could be facilitated by professionals learning to record their intervention goals, procedures and, wherever possible, outcomes, clearly and concisely, avoiding the use of professional jargon. Additionally, a mechanism would need to be established to facilitate transmission of these records among involved professionals.

Table 4.11

Summary of the perceived roles of professional support personnel as indicated in professional submissions

Diagnostician	Consultant	Counsellor	Coordinator	Organisation	Monitoring	Community liaison	Play facilitation
Guidance officers	Guidance officers	Guidance officers	Guidance officers	Guidance officers			
Medical officers	Medical officers	Medical officers	Medical officers		Medical officers		
Physiotherapists (sensory & motor movement)	Physiotherapists		Physiotherapists (with other physiotherapists)				
Speech therapists (language & communication)	Speech therapists						
	Social workers	Social workers	Social workers	Social workers (family emphasis)	Social workers (balance family interests)	Social workers	Social workers
Occupational therapists (gross and fine motor, ADL)	Occupational therapists						
	Physical Educators (movement, perceptual-motor & games)						Physical Educators

4.9 Consultancy Role of the Fred and Eleanor Schonell Educational Research Centre

Considerable consultancy input was available to the units from the research team during the course of the project. Two physiotherapists (employed for 20 hours and 6 hours/week for 18 months) were appointed, with consultancy as one part of their brief. One worked as consultant primarily through the teachers. Her role involved observation and advice, some assessment of the more handicapped children, the demonstration of handling techniques for severely handicapped children, and regular program participation. The other assessed the neuro-sensory-motor and motor skills of the children in the special preschools, making suggestions for inclusion in the curriculum where appropriate. Teacher understanding of neuro-sensory-motor functioning was achieved through activities by this physiotherapist such as writing of documents on the theoretical background and educational implications of dysfunction, literature exchange, and the holding of seminars and demonstrations. An interviewer's guide to sensory motor work was compiled in an effort to fill the gap in available materials.

A human movement studies graduate gave advice on playground organisation and equipment, as well as the organisation of play for handicapped children. Two developmental psychologists with expertise in special education were involved in teacher support and counselling, and some parent counselling. Information, particularly on child development from a developmental psychologist's view was made available. Some advice on programming was offered by one of the developmental psychologists, and by a remedial/resource teacher.

4.10 Other Agencies

4.10.1 Involvement. Many of the children in the special preschools also attended other programs offered by government and voluntary organisations (Table 4.12). The level of help sought and offered varied considerably. For example, in 1979, the four special preschools had separate contact with 10, 11, 3 and 8 other agencies. The complexity is illustrated by the fact that at least 16 other agencies were involved in assessment alone during the monitoring period. Over 70% of the children currently enrolled in the special preschool (1981) attended other programs (Table 4.12); the distribution across agencies of their attendance is presented in Table 4.13.

The outside agencies were the major source of therapy services, particularly in very young children and predominantly via home programs. In 1981, 53% of children in the units were receiving speech therapy, 27% occupational therapy, and 26% physiotherapy services through outside agencies (Table 4.7). The Central Assessment Clinic of the Department of Health (CAC), for example, concurrently served 26% of the children attending the special preschools in 1981.

The views other agencies held of early educational intervention were not documented.

Table 4.12

Other programs concurrently attended by children enrolled in the special preschools

	Unit									
Number of programs	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
					Enrolled (1979)					
No other	8	*53*	8	*50*	8	*40*	5	*25*	29	*41*
One other	2	*13*	6	*38*	10	*50*	9	*45*	27	*38*
Two others	5	*33*	2	*13*	2	*10*	5	*25*	14	*20*
Three others	0	-	0	-	0	-	1	*5*	1	*1*
Total	15		16		20		20		71	
					Previously Enrolled (1981)					
No other	3	*33*	6	*46*	1	*13*	3	*19*	13	*28*
One other	4	*44*	1	*8*	5	*63*	6	*38*	16	*35*
Two others	1	*11*	5	*39*	1	*13*	4	*25*	11	*24*
Three others	1	*11*	1	*8*	1	*13*	3	*19*	6	*13*
Total	9		13		8		16		46	
					Currently Enrolled (1981)					
No other	5	*42*	1	*9*	6	*35*	4	*27*	16	*29*
One other	5	*42*	6	*55*	7	*41*	9	*60*	27	*49*
Two others	1	*8*	4	*36*	4	*24*	2	*13*	11	*20*
Three others	1	*8*	0	-	0	-	0	-	1	*2*
Total	12		11		17		15		55	

Table 4.13

Relative distribution across agencies of the currently enrolled children also attending other programs

Agency	Number	%
Central Assessment Clinic	12	26.1
Other Special Preschool	10	21.7
Community Health	8	17.4
Other School Program	5	10.9
Playgroup	4	8.7
Voluntary Agencies	3	6.5
Hospitals	3	6.5
Child Guidance Clinics	1	2.2
Total	46	100

4.10.2 Method of contact with other agencies. There was no organised regular contact with other agencies, although this began to develop with the Central Assessment Clinic in one unit. Contact predominantly appeared to be on an incidental basis when help in a particular areas was needed. The method of contact was usually by telephone, although written reports were sometimes exchanged.

4.10.3 Consumer view of other agencies. Teachers and other professionals recognised the need for a rationalisation of services to combat both over-servicing and overlaps, as well as gaps, in service provision.

A unit may have different community agencies supporting individual children in the one discipline. For example, occupational therapy services to one unit may be provided to one child by the Central Assessment Clinic, to a second by the Division of Community Medicine in one area, to a third by Community Medicine in a different area, to a fourth by a hospital therapist, and so on. Multiplying this by disciplines, it is clear that teachers have to liaise with a considerable number of therapists and agencies. Equally, individual children in a unit may be serviced by more than one speech therapist, for example, because of the child's involvement with more than one agency or program. At the other extreme, some children were not receiving services beyond those provided at the special preschool.

Parents' views of the individual services received from outside agencies were reported in Table 4.9. Evaluation of parental satisfaction with the various agencies was not sought, although some problems related to this aspect are discussed in Chapters 5 and 6.

4.11 Parent Support Groups

Parents have reported that support from other parents of a disabled child was probably the most effective support they received (NWAC report, 1980). Although documentation of parent support groups fell outside the limits of the monitoring, parents in the special preschools made the following statement :

> *"The development of close parent contact was seen to be an important function for the preschools. Separate P & C Associations were of value and functioned differently to the usual school P & C. There would be value in providing information and ideas relating to the special problems of parents with a handicapped child'.*
>
> (Parent document, 1980).

Generally speaking, provisions for parent support are ad hoc, and not readily available. For example, in a recent survey of 51 of the parents of disabled children from throughout Queensland who attended Access '81, 27 (53%) had no contact with a parent support group. Of the 24 (47%) who had contact, 7 (29%) helped establish the group, 9 (38%) were told of its existence by a friend or relative, 3 (13%) by doctors, and 4 (17%) by therapists and other professionals. Nineteen of the 24 (79%) had found the contact extremely helpful.

It would seem that much needed parent support was a major strength of involvement in the special preschool programs.

4.12 Conclusions

Variability in the development and provision of support services, both as a result of different needs and in the availability of personnel, was apparent.

Support was provided to the children, teachers and parents both directly to the special preschool units and indirectly through the child's association with other agencies. The former was predominantly received from guidance officers, school medical officers and some speech therapists. Most support services, particularly the therapy services, were provided in an ad hoc manner by other agencies. Many issues arising from this outside provision of services require review and rationalisation. These include:

(1) Teachers and parents request that the support by provided in the child's educational setting and parents particularly deplore the lack of therapy support. Parents also want to be spared the transport and other problems associated with a scattered service provision.

(2) Co-ordination at all levels, from government departments to professionals of the same discipline, is urgently needed.

(3) Communication skills need to be developed by all professionals as well as parents.

(4) Rationalisation of services must be undertaken. For example, 16 agencies were involved in assessment overall, yet little assessment information was available on the majority of children for program and curriculum planning. The monitoring team found that outside agencies did not service the whole population, but that many areas of overlap existed.

(5) Record keeping requires review. Complete records should be kept in the special preschool units. Access to other professional information (e.g. medical) needs clarification. Intervention goals, procedures and outcomes should be written in the records by all professionals involved.

(6) The efficient and effective functioning of multidisciplinary/interdisciplinary and transdisciplinary teams needs encouragement. Most disciplines want to diagnose problems in their areas of expertise, and all suggest servicing the units on a consultancy basis. The implications for the teachers, from time and co-ordination to pre-service and in-service requirements, should be considered carefully.

Many of these concerns, such as the provision of adequate support services, are not restricted to the child's participation in early educational intervention programs. They are equally important in the next phase of the handicapped child's education.

CHAPTER 5

BEYOND THE SPECIAL PRESCHOOL

5.1 Integration in Regular Settings and Flexibility of Placement

The Education Department Information Statement explicitly emphasized the importance of maximizing the contact of children in special preschools with a wide range of behavioural models "especially non-handicapped children, in normal settings" (P.3), and the need to keep "a wide range of educational options open for the child". These two principles have direct implications for consideration of the child's contact with the world beyond the special preschool, both concurrently while he is attending a special preschool, and prospectively when he leaves the special preschool to enter the next phase of his education. Flexibility of educational options should operate at both stages.

The need for contact with a wide range of models reflects the philosophical position that espouses the importance of integration of the handicapped or exceptional into the community at large. Adherents of this position typically point to the positive social benefit that may accrue to the handicapped child, his non-handicapped peers and the community at large: in terms of the development of social skills by the handicapped child, the fostering of awareness of the handicapped child as a person by those who are non-handicapped, and, in the long term, the breaking down of stereotypical attitudes towards the handicapped that exist in the wider, "normally developing", community.

5.1.1 The rationale for integration : teacher and parent perceptions.

The specific rationale for the decision to integrate or place children in regular settings will, of course, vary from professional to professional, parent to parent. While there were diverse issues depending upon the individual requirements of the children and their families, one major concern seemed to be represented in the special preschools' policies in concurrent placement in regular settings and in parental expectations of integration. The teachers viewed the regular setting as less formally structured than the special preschool,providing the potential for a broader range of social contacts and a more stimulating language environment for handicapped children. The enriched linguistic environment of the regular setting was felt to be particularly important for those children with less severe language development problems. In their turn, the parents expressed a strong desire for their children to be placed in regular educational environments, for reasons similar to those advanced by the teachers.

5.1.2 Parental concern about integration. Parental concern that their children be placed in regular settings was voiced clearly at the recent Access '81 conference. Parents, particularly the parents of young children, viewed integration in regular educational settings as the optimal placement for their disabled children. They deplored the lack of appropriate integration programs for the 0 - 5 age groups in regular playgroups, preschools and kindergartens, and recommended that appropriate integration programs be provided for all disabled children, including those who had been involved in early intervention programs.

The parents contacted during the monitoring project also expressed concern about the educational futures for their children. The number of children who have "graduated" from the pilot early educational intervention programs is still relatively small, and it was beyond the resources of the monitoring project to follow these families beyond their time in early intervention. Some data are, however, available on the parents' perceptions of their children's futures and these will be discussed later. More extensive information is available on the concurrent integration of children in regular preschools and kindergartens and this will be discussed first.

5.2 Regular Preschool and Kindergarten

5.2.1 The pattern of regular preschool integration. In the 1979 group, 42 children were attending a special preschool and a regular setting while, in the 1980 group, 66 children (or 58%) were in a concurrent integrated placement (Table 5.1). In addition to their special preschool session or sessions, these children visited the regular preschool or kindergarten on average twice a week (varying from 1 to 5 visits a week). The numbers of children in concurrent regular integration varied from none at unit 2 in 1979 to 24 (75%) at unit 3 in 1980.

5.2.2 Teacher perceptions of regular preschool integration. In both 1979/80 and 1980/81 the special preschool teachers felt that the experience of integration was highly valuable and that, in the main, the integration initiative was very successful. They expressed some disappointment that very few of the teachers from regular preschools and kindergartens visited the special preschools and that the contact with the adjoining regular preschools was so limited.

5.2.3 The role of the special preschool adviser in regular preschool integration. The special preschool advisers were regarded by the teachers as providing a valuable link between the special and regular preschools. Several teachers remarked upon the effective liaison established by the advisers and their role in monitoring the children's performance in the regular setting. As such they provided a valuable adjunct to the special preschool teachers who also visited

Table 5.1

Preschool, creche and kindergarten integration

Unit	Total number of children	Number in unit and integrated setting	Average number of times per week	Range of times over number of clients
		1979		
1	28	16	2.5	1 - 5 times per week
2	22	-	-	-
3	24	19	2	2 - 3 times per week
4	28	7	3	2 - 5 times per week
		1980		
1	29	20	3	1 - 5 times per week
2	24	4	1.5	1 - 3 times per week
3	32	24	2.5	2 - 5 times per week
4	29	18	2	1 - 4 times per week

Number of children placed in regular settings 1979 - March 1981

Unit 1	Unit 2	Unit 3	Unit 4
6	2	1	6

the regular preschools and kindergartens to observe the children and advise staff of the details of the child's program in the special preschool. These visits also provided an opportunity for the special preschool teachers to communicate clearly the purpose of integration and their expectations of the integration experience for a particular child. This was important, because it helped to overcome many of the misapprehensions held by some of the staff of the regular preschools and kindergartens who felt they might be expected to conduct a formal intervention program.

5.3 Placement Beyond Early Intervention

5.3.1 Patterns of movement. In total, 112 children left the special preschool units between February 1979 and March 1981. Table 5.2 shows the range of placements for these children. The largest group of children (28) were placed in State special schools following their time at the special preschool. The next most frequent placement was in a Queensland Sub-normal Children's Welfare Association School (19). Of the remaining children, 26 were placed in one of a range of special programs, including 4 in Catholic special education centres, and 19 in facilities for children with specific disabilities (such as the Spastic Centre). One child was hospitalized and one family elected for their child to receive correspondence lessons in the home. Data were not available on four children.

In summary, of the 112 children who had left special preschools, 75 (or 67%) had been placed in some kind of special education program. The remaining 33 children were placed in a state primary school or regular preschool, kindergarten or day care centre.

5.3.2 Regular preschool and kindergarten placement. Detailed data were available on 17 children who were placed in regular preschools and kindergartens (Table 5.3). The reasons for these placements generally indicate the importance placed on anticipated language and social developmental benefits. For a small group of children (3), other reasons applied. For example, one child was so placed because the regular placement was necessary to overcome, in part, the effects of his deprived home environment. In another instance, once the child's behavioural problems had been controlled after 5 months in the special preschool, he was able to be replaced in the regular setting. In a final case, as a result of assessment it was decided that the child could be more appropriately placed in a regular preschool. The decision to place a child in a regular preschool or kindergarten was made in consultation with the parents and, where possible, the guidance officer.

The regular preschool teachers involved with seven of these children responded to a questionnaire asking them to describe their perceptions of the child on entry to their program, and at May 1981. Two teachers reported that the child presented with "problems in all

Table 5.2

Placements from 1979 to March 1981

Placement	N
State Special Schools	28
Queensland Subnormal Child Welfare Schools Association	19
State Preschools	15
State Primary Schools) Catholic Primary Schools)	12
Other Kindergartens or day care centres	6
C.H.I.L.D.	4
Catholic Special Education Centres	4
Spastic Centre	4
Xavier Hospital School	4
Unknown/moved to country	4
Central Assessment Clinic	3
Multicap Meadows	3
Autistic Centre	2
Permanent hospitalization) Correspondence lessons at home)	2
Narbethong School for Visually Handicapped Children	1
Hearing Impairment Unit	1

Table 5.3

Regular placements

Number	Length of stay in special preschool unit	Reason for placement	Perceptions on entry	Impressions as of May 1981
Preschool, day care and kindergarten				
1	3 mths.	Parental decision	Problems in all areas	Not coping
2	5 mths	Behaviour under control	-	-
3	7 mths	Language, social	-	-
4	10 mths	Language, social parent decision	-	-
5	10 mths	Language development	Adapted well - motor problems	Coping well
6	10 mths	Transferred to special unit	Adapted quickly - needs confidence	Coping well
7	10 mths	Parental decision	-	-
8	10 mths	Language, social	Problems in all areas	Gradually improving
9	13 mths	Parental decision Language, social	-	-
10	14 mths	Language, social	Adapted well in all areas	Coping well
11	15 mths	Language, social	Lack of interest in everything	Coping well
12	16 mths	Language, social	Adapted well - motor problems	Coping well
13	16 mths	Language, social	-	-
14	18 mths	Parental decision	-	-
15	22 mths	Would function better in less structured environment	-	-
16	1 mth	Mother requested Language, social	-	-
17	5 mths	Mother requested Language, social	-	-

Table 5.3 (cont'd)

Number	Length of stay in special preschool unit	Reason for placement	Perceptions on entry	Impressions as of May 1981
State primary school				
1	3 mths	Intellectual testing showed low-normal range	-	-
2	3 mths	Language, stimulation	Problems in all areas	Not coping
3	3 mths	Social development	Experienced social difficulties, upset	Coping well
4	3 mths	Parental decision	Not known	-
5	3 mths	Parental decision	Problems in all areas	Not coping
6	8 mths	Parental decision	-	-
7	10 mths	Family request	Problems in all areas	Still problems maybe special school best
8	10 mths	Social development	-	-
9	10 mths	Language, stimulation	-	-
10	10 mths	Language, social	Problems in all areas	Much improved
11	10 mths	Parental decision	-	-
12	22 mths	Language, social	Overawed Problems -	Coping well

areas" of development, and one pointed to the child's "lack of interest in everything". At May 1981 only one of these children was reported to be not coping in the regular setting. These results must, however, be interpreted with caution as the sample size is too limited to warrant extensive generalization.

5.3.3 State primary school placement. Limited information was also available on the children who had left special preschools and entered regular primary school placements. In all, 12 such children were identified by the monitoring team. Questionnaire data from the schools were obtained for 6 of these. On entry, all were perceived as experiencing problems and three were, by May 1981, reported as coping well. Interpretation is limited again by the small sample size.

5.3.4 Perceptions of regular placements. The limited information available on regular placement seems to indicate that the special preschool teachers and the parents favour the practice, but that regular preschool and primary teachers express some clear reservations concerning their ability to cope with exceptional children in the regular setting. This is an area that obviously requires a more extensive study before definitive conclusions can be reached.

It might be worth mentioning that many of the problems experienced by children and parents have been documented, as part of the information from Access '81 - the result of a meeting of parents whose children had varying disabilities and aged from infant to high school.

5.4 Parental Perceptions of their Children's Futures

Some information (again quite limited) was available on the parents' perceptions of their children's future placements. In both 1979 and 1981, parents were asked to indicate the expected primary school placement for their child (Table 5.4). In both years the majority (80% and 69% respectively in 1979 and 1981) anticipated a special preschool placement for their children. When asked to rank the probability of future placement for their child (Table 5.5), 26 indicated that their child would most probably be placed in a "special school with restricted employment opportunities" and 22 stated that their child's future would be in "normal schooling with normal employment opportunities"; a result at variance with the short term view of their children's primary school placements.

Of those parents who responded to a question on the future for their child, the majority (62%) of those with children currently enrolled in 1981 indicated that it would be good or very good (Table 5.6). Their greatest worries at present were, however, first the range of schooling offered, second their children's poor speech development, and third the future placement possibilities for their children (Table 5.7). The uncertainty of the future educational course for their children seemed to be a recurrent issue whenever the monitoring team spoke to parent groups.

5.5 Conclusion

So far, the majority of children who have been enrolled in a special preschool have been placed in some other form of special educational program. This requires many parents to make a difficult decision very early in their children's lives. Many parents decided on regular school placement for their children, and accepted the possibility of continued special education with reluctance. In part, this perhaps reflects unrealistic parental expectations about the ability of early intervention to effect a total change in their children's developmental status. It may also reflect some of the problems in the assessment procedures as discussed in Chapter 2. The limited instruments and resources available for assessment may make appropriate placement decisions about young handicapped children even more difficult than in the case of older children. In any event, the need for flexibility of placement throughout the whole of the child's education is an issue of central importance.

Table 5.4

Expected primary school placement

	Unit									
Placement	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Enrolled (1979)										
Regular	3	20	2	13	4	20	1	5	10	19
Special	12	80	14	87	16	80	18	90	60	80
Undecided	-	-	-	-	-	-	1	5	1	1
Total	15		16		20		20		71	
Previously Enrolled (1981)										
Regular	2	22	3	25	1	13	4	25	10	22
Special	6	67	8	67	7	88	12	75	33	73
Undecided	1	11	1	8	0	-	0	-	2	4
Total	9		12		8		16		45	
Currently Enrolled (1981)										
Regular	4	33	3	27	6	35	3	20	16	29
Special	8	67	7	64	11	65	12	80	38	69
Undecided	0	-	1	9	0	-	0	-	1	2
Total	12		11		17		15		55	

Table 5.5

Parents'views of the future placement of their children

	Unit									
	1		2		3		4		Total	
	N	Ranking	N	Ranking	N	Ranking	N	Ranking	N	Ranking
	Previously Enrolled (1981)									
Normal schooling with normal employment opportunities	2	2	6	1	2	2	7	2	17	2
Special schooling with restricted employment opportunities	5	1	6	1	5	1	10	1	26	1
Sheltered workshops	1	3	1	3	1	3	1	3	4	3
Home care with therapy	0	-	0	-	0	-	0	-	0	-
Institutional care	1	3	0	-	0	-	0	-	1	4
	Currently Enrolled (1981)									
Normal schooling with normal employment opportunities	7	1	4	2	7	2	4	3	22	2
Special schooling with restricted employment opportunities	4	2	6	1	10	1	6	1	26	1
Sheltered workshops	2	3	2	3	3	3	5	2	12	3
Home care with therapy	0	-	0	-	0	-	1	4	1	4
Institutional care	0	-	0	-	0	-	0	-	0	-

Table 5.6

Parents' views of the future for their children

	Unit									
	1		2		3		4		Total	
	N	%	N	%	N	%	N	%	N	%
Previously Enrolled (1981)(1)										
Very good	0	-	2	25	1	20	3	30	6	23
Good	1	33	3	38	3	60	3	30	10	39
Difficult	2	67	3	38	1	20	4	40	10	39
Total	3		8		5		10		26	
Currently Enrolled (1981)(2)										
Very good	0	-	0	-	2	20	1	10	3	9
Good	5	71	4	57	3	30	6	60	18	53
Difficult	2	29	3	43	5	50	3	30	13	38
Total	7		7		10		10		34	

(1) Twenty observations are missing

(2) Twenty-one observations are missing

Table 5.7

Parents' greatest worries about their children

	Unit									
Parents'	1		2		3		4		Total	
worries	N	Ranking	N	Ranking	N	Ranking	N	Ranking	N	Ranking
				Previously Enrolled (1981)						
No proper diagnosis	0	-	1	6	0	-	3	6	4	8
Need for constant care	2	3	1	6	0	-	3	6	6	6
Lack of self-help skills	1	5	0	-	2	5	3	6	6	6
Poor speech development	4	1	4	3	4	1	5	4	17	2
Inability to develop social skills	1	5	3	4	1	6	5	4	10	5
Types of schooling offered	4	1	8	1	4	1	10	1	26	1
Employment opportunities	1	5	5	2	3	3	7	3	16	3
Future placement	2	3	2	5	3	3	9	2	16	3
				Currently Enrolled (1981)						
No proper diagnosis	0	-	1	6	5	5	2	5	8	7
Need for constant care	1	6	2	5	3	8	1	8	7	8
Lack of self-help skills	1	6	1	6	4	7	3	4	9	6
Poor speech development	4	2	5	2	6	3	9	2	24	2
Inability to develop social skills	2	4	0	-	6	3	2	5	10	5
Types of schooling offered	6	1	7	1	14	1	10	1	37	1
Employment opportunities	4	2	5	2	5	5	2	5	16	4
Future placement	2	4	3	4	8	2	5	3	18	3

CHAPTER 6

ISSUES AND RECOMMENDATIONS

The preceding chapters have presented descriptions of the contexts, programs, and support services for the pilot early educational intervention programs and, finally, looked briefly at the progress of some children beyond the special preschool. These descriptions combine to make a montage depicting the many facets of the evolution of the pilot special preschool programs. The dynamic, diverse, and developing nature of early educational intervention in Queensland has emerged as a central feature of the description. The formal data collection phases of the project have provided "slices of time" : the small segments from which the statistical picture of the pilot project has been assembled. The less formal interview and questionnaire data have given the monitoring team insight into the opinions and attitudes of the parents, program staff and other professionals involved with young handicapped children in the special preschools. Finally, the day to day contact of members of the monitoring team with the programs has added to the team's appreciation of the rich, qualitative dimensions of the programs.

In all, the monitoring project has been a complex exercise in documenting the simultaneous changes in a range of evolving elements of the special preschool services. In the first instance, this has involved description of changes in the clientele (child and family), the special preschool staff, and in associated professionals (such as guidance officers and school medical officers). At a further remove from the preschools, changes have been noted in the emphasis of government departments and, in particular, the divisions most closely involved in early intervention. In addition, changes have occurred in the positions taken by the professional organizations whose members are, or will be, working in the area of early intervention with young handicapped children.

The research team has had an invaluable opportunity to observe the initial reactions of all these groups to the emergence of a new aspect of the State's involvement with the education of exceptional children, and to monitor the changes in their attitudes to, and conceptions of, early intervention. A central part of this process of monitoring has been to facilitate meetings of the various groups involved to discuss critical issues of concern to them.(1) The monitoring project has been formative, contributing to the process of evaluation of the pilot programs through consultation with program staff and, furthermore, through catalysing joint discussion among the many groups involved with early intervention.

---

(1) In total, 180 consultations, meetings and seminars have been held from the project's commencement in May 1979, to the final seminar in July, 1981.

Over the two years, and the numerous contacts with the program staff and the many groups associated with the pilot project, a number of issues have crystallized concerning both the current pilot stage of development of the early educational intervention programs, and the possibilities for their future development.

The monitoring team rapidly became aware of the dynamic nature of the pilot early educational intervention programs. From the outset, a process commenced of refinement and adjustment by the Education Department and the program staff of the guidelines formulated in the Education Department Information Statement. This was to be expected and the facilitation of this process was one of the central aims of the pilot project. At each unit, teachers soon began adjusting their programs to the perceived needs of their clientele, within the constraints of the resources available.

The initial phase for each unit was marked by a high degree of uncertainty on the teachers' part regarding the expectations of the Department of Education and the exact nature of the resources available. This was clearly a very stressful time for the teachers, who also were attempting to alleviate the anxieties of the parents, who themselves were uncertain of the exact nature of early intervention and its implications for their children. There was also a high degree of uncertainty, and at times misapprehension, on the part of some of the staff members of other agencies involved with the clientele, or potential clientele, of the special preschools.

With the establishment of contact between the special preschools and the other agencies providing service within their catchment area, many of the anxieties began to dissipate. Establishing the network of communication for some units, however, required a considerable effort by the staff. For others, the network was established quite rapidly. Overall, the establishment of contact seemed to be the result of the initiatives of the preschool staff, the guidance officers and the school medical officers. The establishment of communication networks at the "work-face" was not always supported by similar structures for communication at the higher administrative and policy levels. Gradually, however, such structures appear to be emerging and will be discussed later in this chapter.

The first two years have seen considerable reformulation of the Department of Education's emphases within the field of early educational intervention. Some of the changes have resulted from constraints on the programs, such as limited staff time, expertise, and staff perceptions of their roles. The predominance of unit over home based program implementation in part reflects the dual impact of time limitations and the historical reticence of teachers to be heavily involved in delivering services to children in their homes. The limited involvement of parents in the processes of program development and implementation may also reflect the pervasive influence of traditional definitions of the teacher role by parents and professionals. Other changes in the operationalization of the program guidelines reflect rationalizations of service delivery across agencies. This is one of the most salient features of the pilot programs. For example, the predominance of children in special preschools who are three years or older reflects a healthy co-ordination of the work of the special preschools with other agencies, such as the Central Assessment Clinic, which has maintained its involvement with the very young members of the handicapped population. There is now evidence of a very effective network of cross-referral between the two agencies.

Facilitation of further communication lies at the heart of many of the specific issues which need to be addressed. The pilot early educational intervention programs are dynamic by virtue of the fact that they are new human organizations which, because of their newness, face considerable uncertainty. In such a circumstance, the probability of breakdowns in communication is high. The future course of the development of special preschools in Queensland will vitally depend on the establishment of effective networks of communication. This is a theme that has implications for each of the specific issues to be considered.

The discussion of issues to follow will be organized around the four topics considered above, namely:

- the contexts of the pilot early educational intervention programs,
- program development,
- support services, and
- beyond the special preschool.

6.1 Contextual Issues

6.1.1 Family characteristics and access. The characteristics of the communities served by a special preschool should determine the configuration of needs to be met by the early educational intervention program. Differences in socio-economic status carry with them some important differences in the problems confronting the families, differences of which the program staff need to be aware. If early intervention is to be directed to the family as client, then the needs of the entire family must be assessed, as well as the needs of the target, handicapped child. The requirement for personnel to undertake this form of family assessment has been clearly stated by the program staff, and many of the other professionals involved with the pilot programs. The discipline best suited to provide this service, social work, has been conspicuously absent from the pilot programs.

The limited description of family characteristics in the current project has pointed to some of the problems of access that may affect both delivery of services to those families in need, and the degree of cost to the families in receiving those services. Access to the programs may differ from one social group to another, and from one location to another. Access takes at least two forms. First, families differ in their awareness of the existence of a program, in part as a function of their ability to gain access to services in general. Families isolated by economic disadvantage and limited education, as many of the families at unit 1 appeared to be, may be harder to involve in a service such as early educational intervention. Problems of access may also take a second form. Families differ in their access to transport to a special preschool, again as the families at unit 1 did, and this requires careful consideration of the location of the special preschool, not only in relation to public transport, but also in relation to other services that may be concurrently attended by children in the early educational intervention program. Again, family needs will have to be assessed and policies will be required for differential allocation of subsidies to units according to need.

Over the monitoring period a salient feature of the pilot programs was that parents took advantage of the opportunity for informal contact with the special preschool staff. In all units the staff provided information for parents on other services available to their families. This part of the teacher role is clearly important, but raises issues of preparation of the teacher to act in this way.

Recommendations:

- *Trained specialist personnel should be available to assess family needs, family resources to support their handicapped child, and aspects of the family context that may be relevant to the early educational intervention program. The skills of social workers are most appropriate to these tasks.*
- *A survey of the extent of awareness of the existence and nature of early educational intervention programs should be conducted among families, schools, medical practitioners, and other service delivery professionals in the catchment area for any existing or projected special preschool.*
- *Special preschools should be located as close as possible to public transport, with easy access from the street to the unit and, wherever possible, in close proximity to other relevant services.*

- *The teachers in special preschools should be explicitly prepared for their role as information resource persons for parents.*

6.1.2 The characteristics of the children requiring early educational intervention programs. From the data available to the monitoring team, it is clear that there was a considerable range both of types of handicapping conditions and of their severity in the pilot programs. The non-categorical philosophy of early educational intervention was not, and probably cannot be, applied fully in practice, despite the general adherence to the principle. Children were still labelled and grouped in terms of broad categories of handicap or delay. There is clearly a need for a system of classification in addition to the diagnostic categories (such as Down syndrome, cerebral palsy or spina bifida, for example), that enables delineation of the specific educational needs of particular children in a way that informs the development of their educational programs and the formation of program groups. In the main, groups within the special preschools were formed on the basis of single characteristics of the children (such as degree of intellectual handicap or language delay). In large part, this practice stemmed from the limited assessment data available on children at their entry to the special preschools. Where assessment data were available, the teachers reported that they often did not find the information relevant to the process of programming. The teachers were, at times, provided with scant "working-images" of the children and their developmental characteristics. Such a situation increases the risk of inappropriate labelling, and the affirmation of a non-categorical approach does little to prevent the practical ills that flow from an inappropriate assessment base for programming.

One solution to the problem lies in the assessment of the children's specific competencies, in specific areas of performance. This approach, at least, provides guidelines for programming but has the danger of directing attention solely to the development of a diverse set of skills, without a working model of how the specific skills inter-relate in the overall processes of development.

The neuro-sensory-motor and motor assessment data on the children in the programs are disturbing. If representative, the results suggest a disquieting level of what could be regarded as subclinical problems of motor development, and lead one to argue for the urgent need for consultants in the area of motor programming, as well as the better preparation of teachers to work in this area. The teachers continually expressed concern about their ability to implement programs directed to the motor development of young handicapped children. Given the dangers of some techniques in this area, the provision of an expert consultancy service in this area is an urgent requirement.

It is also clear that many of the children attending special preschools were not only at risk for educational problems, but that, in many cases, these problems were exacerbated by their poor health. The level of health problems and their likely educational impact also need to be assessed, again suggesting a role for a specialist medical consultant. Such a consultant could play an essential role in the initial assessments of the children.

Developmental characteristics cannot be assessed appropriately in isolation from the environmental features that influence the course of development. Information on the family context may provide valuable guidelines to the type of program required by the child. For example, many of the children at unit 1 showed general developmental delays. In many cases it was felt by program staff that these delays were not organically based, but rather reflected the effects of environmental deprivation. The program needs for these children were perceived as general environmental stimulation. Assessment of the child in the context of the characteristics of his home and family may also provide valuable information on the extent to which the family is able and/or wants to be involved in the process of early educational intervention. Again, a skilled assessment by a social worker of the family circumstances could be a useful addition to the assessment information.

Recommendations:

- *Initial assessment of children should be undertaken on entry, or soon after entry to the special preschool.*
- *Such assessment should include educational, psychological, language, motor, and medical components, and any other areas required to give a comprehensive picture of a particular child's developmental status.*
- *The aim of such an assessment should be to provide information relevant to the design and implementation of the intervention program.*
- *The child's developmental characteristics should be viewed against the background of an assessment of the home and family context, ideally by a social worker.*

6.1.3 Assessment, record keeping and information exchange. The adequacy of assessment procedures for early educational intervention programs raises several issues urgently requiring consideration. From the data provided in chapters 2 and 3, it is clear that some children received very little systematic professional assessment, either prior to, or during, their time in the special preschools. It is also clear that much information which was gained was not recorded and, therefore, was not available to the other professionals concurrently, or later, concerned with the children's development.

The records available to the monitoring team presented a picture of a "patchwork" approach to assessment. Some agencies provided assessments with extensive coverage of developmental areas, for a small proportion of the special preschool clientele. Other agencies provided assessments of a more restricted set of developmental areas, for a larger proportion of the clientele. Some children apparently were not assessed. From the recorded information it seems that re-assessment of children, so essential for ongoing monitoring, program planning and placement review, was the exception rather than the rule.

These limitations of the assessment data base have very serious implications for the provision of early educational intervention services. Part of the problem is the need for more and better instruments, for both screening and assessment, designed for use in the Australian context. But more seriously, the limitations reflect the serious lack of personnel, both trained and experienced in assessing young handicapped children, to use the instruments that are available.

The pilot early educational intervention programs have provided an opportunity for the Division of Special Education to develop a nucleus of personnel with experience and insight into the particular problems of delivering guidance services to the clientele of special preschools (an issue that will be further discussed later in the chapter). The pilot project has also provided an opportunity to consider the implications of this new sphere of service delivery for the pre- and in-service training of assessment personnel. While all agencies continue to suffer severe personnel shortages, improved training will provide only a partial solution.

The nature of problems of development in infancy and early childhood is such that it is desirable to assess the young child over an extended period of time, before reaching a final decision on his need for special educational and developmental provision. The process of assessment and intervention commences with screening and referral of children thought to be "at risk" for developmental problems. Developmental screening is now an important part of the regular preschool system in Queensland. It is desirable, however, to identify even earlier than the preschool years children who may be "at risk". The problems of how, and where, this screening should be done are vexatious, but clearly require co-ordination of professionals in agencies such as the Division of Maternal and Child Health, the Division of Community Health Services, and the children's hospitals as well as the networks of private practitioners involved with infants and young children.

Once a child is identified as "at risk", his admission to an early educational intervention program can provide an opportunity for intensive assessment over an extended period, in the special preschool, in regular settings and, wherever possible, in the home. There is also a clear need for mechanisms of periodic review of the child's developmental status, and systematic evaluation of his functioning in a variety of settings as perceived by an appropriate range of assessment specialists. Such evaluations and periodic reviews necessitate structures for case conferences and are vitally dependent upon efficient exchange of assessment information.

The approaches to assessments, and particularly assessment record keeping, observed by the monitoring team, often seemed to impede effective information exchange and co-ordinated assessment in a number of ways. First, the records varied considerably in their content and format, and a particular discipline's technical vocabulary may have made effective multidisciplinary use of the information difficult. Second, agencies varied considerably in their policies and procedures for information storage, retrieval and exchange.

In part, the difficulties arose because of differences in procedures for record keeping and the inability of assessment personnel to complete full records, given the other demands upon their time. They seemed most likely to record formal test results, and least likely to record details of informal observational assessments. Test results were often recorded in a form that was too cryptic for optimal utilization by the teachers and other interveners. Ironically, the information recorded by the assessor, for example numerical results of intelligence tests, was often that which was least informative to the interveners, faced with the problem of designing and implementing intervention programs.

The time currently invested in assessment could yield a greater return if the information was recorded in a form readily available to the other professionals who are either involved with the children or likely to be so. The lack of transportable records means, in many instances, that professionals are forced to cover much of the ground already covered by others, and collect information, potentially available, but not transmitted to them, because of inadequacies in record keeping systems. The impact of these problems is magnified when children move to other regions or interstate.

Furthermore, mechanisms for efficient information exchange should be established. There is clearly a need for agencies to examine their procedures for information storage, retrieval and exchange. There is also a need for them to review the availability of skilled personnel to marshall assessment information. Finally, the establishment is urgently required of explicit information exchange networks, linking agencies and nominating persons available to liaise with the private practitioners who frequently also hold important information about the children.

Many professionals cite the dangers of potential abuse of assessment records which may result in inappropriate labelling of children. Their arguments are not altogether convincing in the light of the evidence that children are being catalogued and grouped whenever they become involved in an intervention program and whenever placement decisions are made. The label may be attached with very little information recorded to justify it. In such cases, if records are not available, it is very difficult for professionals to judge the appropriateness of the consequential decisions without conducting a full assessment, and this further assessment may entail inefficient repetition. When systematic assessment records are not maintained, it is also very difficult for interveners (and researchers) to evaluate the effects of intervention programs on the overall developmental status of children.

Given the pressures for legislation ensuring freedom of access to recorded information, the rights of parents to read their children's assessment records need to be considered. The implications of parent access are far reaching, and both individual professionals and agencies will need to consider ways of providing parents who are so desirous with appropriate access to their children's records.

Recommendations:

- *Increased numbers of personnel should be provided as a matter of urgency to agencies screening and assessing young children with a view to placement in early educational intervention programs.*
- *The training of educational, psychological, therapy, social work and medical professionals to work in early intervention should provide basic preparation in the screening and assessment of very young children.*
- *The agencies employing such professionals should facilitate the emergence of specialists in the area of developmental assessment of young handicapped children in order to form an assessment nucleus in each region served by the agency.*
- *Mechanisms should be explored to ensure the efficient assessment of all children requiring such services, and the coordination of agency personnel to achieve this end.*

- *Assessment information should always be recorded in an efficiently transportable form to provide access to information by all the professionals needing it.*

- *The training and functioning of professionals should underscore the need for communication of information in a form and language that crosses the disciplinary boundaries and wherever possible avoids the use of technical language.*

- *Efficient mechanisms for case coordination and multidisciplinary consultation on particular children need to be established, and effective networks of information exchange formed among the agencies and professionals involved with children attending special preschools.*

- *There should be explicit policies ensuring ongoing assessment and periodic review of placement for all children in early educational intervention programs.*

- *Skilled support staff should be appointed to ensure efficient information storage retrieval and exchange.*

- *All agencies should explore the formulation of policies and the establishment of procedures to enable parents to have access to their children's assessment records, should they so desire.*

6.2 Program Development

6.2.1 Teacher philosophies and roles. The teachers' philosophies of early educational intervention showed considerable change over the monitoring period. Early intervention is a relatively new educational area and it is to be expected that there will be a period of formulation and re-formulation of philosophies and concepts in the area before consensus is achieved and clear policies enunciated for the Queensland special preschool system. This is a healthy state of affairs, in that the Department's initiatives were clearly conceived as pilot programs, and the staff involved saw their role as part of the processes of research and development. It is under these circumstances, however, essential to provide staff members with the support they require, given the uncertainties of operating within very broad guidelines and with a very broadly defined set of roles.

The role of these teachers in early educational intervention was indeed more broadly defined than the traditional teacher role in other areas of special education, involving them in home visiting (to a lesser extent home programming), parent support and some counselling in crises, and liaision with other professionals and agencies as well as program development and implementation. They expressed concern about their abilities to perform all of these functions, although they clearly had an expectation that they would be required to take a role that extended beyond the traditional teaching functions. The realities of the first year of the pilot programs made most of them revise their expectations, progressively limiting the diversity of their roles.

The teachers suggested that many of the difficulties they experienced did indeed stem from the breadth of the Departmental guidelines and the lack of a clearly defined support network. They desired greater contact with senior Departmental officers who could be seen as specifically performing an advisory and support function vis-a-vis the special preschools. The Regional Guidance Officers were seen as providing an effective administrative support, but teachers continually lamented the lack of an easily accessible adviser to consult on educational, program-related and management problems. Throughout, many of the teachers reported a sense of isolation and of high anxiety during the first year of the pilot programs.

The strain of the parent support role was also obvious in their comments to the monitoring team. The teachers felt unprepared for this part of their role. Their initial response was to ask for in-service courses on counselling. Later they sought advice on how, where, and to whom to refer parents needing specialist help. Invariably, close contact with the families meant that the teachers were often the most accessible people with whom the parents could discuss their problems. Time and again the teachers expressed a desire for greater support from the Department of Education, so that they, in turn, could cope with the stresses of parent support.

Many of the difficulties encountered by the teachers were the result of the limited time available to them to perform both the program implementation and parent support aspects of their role. Home visiting was, at times, difficult : at one unit it was made even more difficult by the Principal of the adjoining State School, who expected the teachers to be in the special preschool during school hours, five days per week! The teachers expected to be involved in working closely with parents in the units and at home, but found it difficult to offer an intensive unit based program while simultaneously providing adequate parent support. Gradually the Departmental emphasis has come to be placed on the teaching role. While this is a practical necessity, it is unfortunate that the unique position of the teachers to provide parent support cannot be exploited more fully.

One solution to the problem of limited time for parent support may lie in the use of aides and volunteers to implement parts of the programs developed by the teachers. This approach has been explored in a number of units with apparent success. The use of volunteers would seem to be a cost-effective way of achieving a high degree of individualization of program implementation and thereby freeing the professional staff to devote their energies to program development, ongoing assessment, parent support, and home based programming.

Throughout the monitoring, the teachers expressed doubts about their competence to develop home based programs for infants and very young handicapped children. This was coupled with an expressed need for better knowledge of the early development of both "normal" and exceptional infants.

Recommendations:

- *Ongoing discussions should be held at both the policy making and program implementation levels to crystallize an overall philosophy of early educational intervention that can be adapted to the range of client needs.*
- *The teachers' role in early educational intervention should be re-considered to allow rational use of time for both unit based programming and home based, parent support activities. This may necessitate increased involvement of aides and volunteers in program implementation.*
- *The preparation of teachers for work in special preschools should include training in basic crisis counselling skills and sufficient knowledge of the counselling service delivery system to be able to make appropriate referrals.*
- *An explicit policy should be formulated on the provision of a Departmental officer in each region as the identifiable support and advisory person for the special preschools.* (1)

---

(1) It may well be that some of the current special preschool teachers could enact this role.

- *The nature and function of home based services in early educational intervention should be investigated with a view to improving this aspect of the service. Particular attention should focus on ways of enabling the teacher to provide an adequate home visiting service, given the serious constraints on staffing.*

- *The training of teachers to operate special preschools should emphasize the acquisition of knowledge of both normal and exceptional developmental patterns in infancy and early childhood.*

6.2.2 Program development and implementation. The problem of limited assessment information has a direct impact upon the process of program development. In the absence of detailed, relevant assessment information teachers run the risk of gravitating to one of two polarized positions on programming. The first is the provision of a very broad general stimulation program, loosely formed within a conception of the course of normal development. The second is a highly formalized program that aims at the development of specific skills without a unifying model of overall development. The monitoring team detected pressures, particularly from regular preschools and kindergartens, for the adoption of the former, that is of a general developmental stimulation model. There were opposing pressures from some special educators advocating the more formalized precision teaching model. The situation is a very interesting one, because it indicates the very different perceptions of the clientele and their needs, held by the two groups. The impression formed by the research team was that regular preschool personnel generally perceived the clientele as most similar to "normally developing" children, whereas the special educators had a picture of the clientele as most similar to the moderately or severely handicapped population.

The data provided in Chapter 2 indicate a range of developmental levels extending from the "normal" to the "extremely" exceptional, so that each group, regular preschool and special education, is in fact probably correct in its conception of early educational intervention, but only for part of the clientele. Both groups need to become aware of the diversity of educational needs confronting the teachers in the special preschools, and for their part the teachers may have to adopt a catholic attitude to the ideas and concepts from both regular and special education in order to develop programs tailored to meeting the range of needs of their children. There is clearly much to be gained from ongoing dialogue with regular preschool and kindergarten educators, and the current divisions between regular and special preschools can only be seen as counterproductive. The current climate of misconception of early educational intervention impedes the process of cross-fertilization of programming ideas and approaches.

Part of the problem lies in the confusion of the terms 'structure' and 'formality'. The special preschools have, ironically, often borne the brunt of two sets of criticisms of their programs. The first criticism is that programs are too highly structured, particularly for the education of young children. The counter criticism is that the special preschools are not sufficiently structured and that there is not enough formal teaching. Again, both criticisms are too general. Each fails to take sufficient account of the diversity of abilities and disabilities represented in the special preschools. The existence of this diversity indicates that different children clearly need different amounts of structure in their educational programs.

All parties seem to agree that formality is not at all desirable for young children. But structure does not presuppose formality. It does, however, presuppose planning and the formulation of sequential objectives.

In the main, specific objectives were not recorded in programs. This limits the use of the program records as part of the assessment information base and suggests that internal monitoring of the program may be less than systematic. The process of program review would be facilitated by a more detailed recording of program objectives and outcomes.

To achieve this, appropriate program formats, and time for compiling them, are required. It was difficult to reach consensus on uniform format among the teachers in the pilot programs, and to expect consensus is probably premature, given the inchoate nature of early educational intervention at this time. Whether or not a uniform system evolves, attention must be paid to systems for enabling teachers to carry out the time consuming process of detailed recording of program information. This should be a high priority when programming approaches are still in the early stages of development. The examination of program records in Chapter 3 provides a basis for the extension of the systematic development of a range of programs for use in special preschools. The central concern should be to develop programming approaches that facilitate ongoing evaluation of the children's performance and which directly feed into the processes of assessment.

As with assessment, it is lamentable that the separate disciplines in contact with the children do not, as a rule, contribute to the process of developing coherent programs for the children attending the special preschools. This may lead to a fragmented, disjointed and, more disturbingly, inconsistent or contradictory approach to intervention. The involvement of speech therapists with several of the units has enabled processes of collaborative programming to begin. However, interdepartmental differences in employment policies have made it more difficult for this process to occur more widely across the diversity of relevant disciplines.

Recommendations:

- *There is an urgent need for collaboration between the Divisions of Preschool Education and Special Education. Structures should be established for consultation and collaborative program development. Kindergarten organizations and other agencies should also be involved in these processes of collaboration.*
- *Regular and Special Preschool program staff should be involved in periodic exchanges to enable both groups to become more aware of the particular needs of the other's clientele.*
- *Systems for detailed program record keeping should again be investigated as a matter of urgency; ways of ensuring that teachers have sufficient time for this activity should be considered.*
- *Wherever possible, the other professionals involved with the children's development should be included in the process of program formulation.*
- *Program record keeping and evaluation should be seen as part of the ongoing assessment of the children.*
- *The feasibility of summarizing program records in a form that allows access and transmission to other professionals and parents, should be considered.*

6.2.3 Parents and programming. Parent involvement in program development and implementation remains a vexatious issue. Program staff expressed considerable ambivalence about parent involvement. Some parents explicitly indicated their desire to be involved and were disappointed that they were not consulted more about their children's disabilities and their implications for program development. Other parents demonstrated a willingness to allow program staff to take sole responsibility for the intervention program and welcomed the opportunity to be relieved of part of their burden in parenting a handicapped child. This is an area where knowledge of family wishes and resources needs to guide program decisions. There is a clear need to tailor the programs to the people's needs and resources, and not the people to the program.

Even when a family is eager to be involved in program planning and implementation, it is essential that family members do so with the support of professionals. It simply cannot be assumed that the family will cope with the added demands of implementing early intervention programs without appropriate emotional support and practical professional guidance, just as it cannot be assumed that teachers can operate in this area without support. Careful monitoring is again required and teachers may be best advised to do this in conjunction with a social worker or guidance officer.

The teachers in the special preschools had been led to expect that they would be involved in engendering child management skills in those parents requiring assistance in this area. They questioned their ability to conduct such "parent training" courses and suggested that this might be more appropriately the province of the guidance ofifcer. There is a clear need to look at the extent to which guidance staff are able to take over this function, and the implications of a decision to involve them for the future training of guidance personnel.

Recommendations:

- *In principle, parents should be directly involved in their child's program wherever possible. Careful consideration, however, should be given to the wishes and resources of families before they are involved. The services of a social worker could be utilized in this area.*
- *Any program implemented by a parent should be carefully monitored to ensure that parents are coping and where necessary additional support should be provided to facilitate implementation.*
- *Appropriate staff should be trained to offer behavioural management programs for those parents desiring assistance in handling their handicapped children.*

6.3 Support Services

6.3.1 The availability, training and functions of support personnel: guidance officers, school medical officers, paediatricians, speech therapists, occupational therapists, physiotherapists and social workers. The limited time available to guidance officers for their involvement with the special preschools has already been discussed. All agencies providing support services reported limited staff and, therefore, limited time for involvement with these early educational intervention programs. The guidance officers framed another dimension of the problems associated with their role vis-a-vis early educational intervention. The nature of the four units, the variety of clients and their backgrounds, argue the need for extensive time being spent by the guidance officers in the programs, especially as overall policy is somewhat undefined. As they point out, they need, however, to continue to spend a proportion of their time working with the "normally" developing population to keep a perspective on the place of the special preschool in the spectrum of educational provision in Queensland.

Like the teachers, the guidance officers expressed feelings of considerable uncertainty about their role. They felt that the role of any guidance officer in early education intervention programs should be clearly defined and specialisation encouraged. This would require extended training, particularly in: early childhood development; assessment tools for children aged 2 weeks to 5 years; handicapping conditions, especially those common in the units such as Down syndrome, spina bifida, autism, cerebral palsy and their associated problems; and behavioural problems and management techniques. They stressed the need for the specialists to be experienced guidance officers who have gained a perspective of the whole service delivery system, and who have the opportunity to maintain the perspective through experience in a wide range of work situations.

All stressed the need for more time in the units, and this mirrored teacher comments concerning the need for the guidance personnel to have greater contact with the parents, and greater opportunity to see children in their program settings.

One solution to the problem of limited time would be to use a team consisting of a guidance officer and one other professional, such as an advisory teacher, to give a balance of involvement. The guidance officer could act as the co-ordinator of assessment information, conducting some formal assessments but delegating the task of observation and monitoring in the special preschool, regular preschool and home to the advisory teacher. This model seemed to work effectively when tried by one of the guidance officers and a special preschool advisor in 1979 and 1981, and warrants consideration as a partial solution to the problems of limited availability of guidance officers.

Limitations of staff and available time also applied to the services provided by school medical officers, who expressed concern about the availability of medical professionals to staff further developments of intervention services, particularly in isolated and rural areas. Issues related to child development, behaviour and developmental disability in childhood, as well as counselling, are rapidly assuming an increased importance in paediatric training programs. It was considered important that paediatricians in their training should work with specialists in the fields of education, speech therapy, occupational therapy, physiotherapy, psychology and social work, so that they might acquire an understanding of roles, contributions and approaches. The team approach was stressed.

It was also suggested that paediatricians and school medical officers could, in conjunction with the therapies, contribute to the training of educational staff for the programs.

Team functioning depends on optimal communication which, in turn, requires facilitation. In order to encourage this, issues relating to professional ethics and traditional territorialities require investigation. It was suggested by the medical officers that carefully structured record keeping would facilitate useful communication between medical and other professionals in all the relevant agencies.

In general, it was apparent that private medical practitioners needed to be better informed regarding the presence, philosophy and operation of the early educational intervention programs.

The limited availability of therapists was a source of concern to both parents and teachers. Workable collaboration had developed between the speech therapists and the teachers in several instances but, again, the limited contact of the therapists with the special preschools often limited the scope of the collaborative effort.

For all the therapies, increased staff numbers, reduction of case loads and the availability of staff experienced in paediatrics were believed necessary to improve services in the future. Specific concerns were expressed by both occupational therapists and physiotherapists. Occupational therapists felt that educational advisors and teachers should be more aware of occupational therapy skills and services. It was also felt that occupational therapy students should become more informed about educational practice and teaching skills, and that, in turn, occupational therapists could inform educational personnel on development, positioning, handling, play and appropriate specialized equipment.

Physiotherapists suggested that they should be employed by the Health Department to work in schools. They questioned the advisability of educational programs for children under 3 years. They considered that recent graduates were adequately trained to enable their effective participation in early intervention. More staff, and greater flexibility for staff already working in other agencies and in hospitals (particularly country hospitals) would, in their view, expedite better service delivery.

The absence of social workers from the special preschool support service network is particularly disturbing and reflects, in part, the historical separation of teachers and social workers. Social work students clearly need a greater awareness of the principles and methods of education and, in turn, social workers could contribute knowledge of family dynamics and the emotional, psychological and social effects of disability to students in educational courses.

Recommendations:

- *There should be a general review of policies concerning the availability of guidance officers, school medical officers, therapists and social workers to support early educational intervention programs.*
- *Wherever possible, mechanisms should be developed for better co-ordination of support service delivery, including networks of information exchange.*
- *Awareness of developments in the field of early educational intervention should be fostered in each of the disciplines likely to be involved in providing support services to special preschools. This implies the need for revision of some of the content of training programs.*
- *Guidance officers should be enabled to devote greater time to early educational intervention programs and to act as co-ordinators of information.*
- *Advisory teachers should be employed in part to assist the guidance officers with collection of assessment information.*

6.3.2 Team approaches to the delivery of support services. The problems of current State Government policies restricting employment of physiotherapists, occupational therapists and medical personnel to agencies of the Department of Health was a recurrent theme in our discussions with the program staff and many of the involved professionals. These policies have impeded attempts to establish assessment and intervention teams to deliver the multifaceted programs required by many of the children attending special preschools. Notwithstanding, there is a need for all disciplines to explore ways of facilitating some mode of team functioning in order to co-ordinate the delivery of support services efficiently.

A variety of models for team functioning is available. In multidisciplinary teams the members work side by side in their own area of professional expertise without role sharing; the areas of responsibility are clearly defined. Interdisciplinary teams encourage professionals to substitute for each other. Role definition is decided by the team around each child and the family. It requires mutual trust, respect for professional competency and awareness of professional limitations. Transdisciplinary teams encourage the assimilation of knowledge from other professions and the crossing of discipline borders. It should be recognized, however, that the wide range of knowledge and skills in the field of child development could never be offered by a single practitioner.

Therapists and other support professionals can work within an educational setting on at least three levels: (1) the traditional role of withdrawing the child from the group for individual or small group assessment and therapy, (2) as a consultant, and (3) as a resource person or educator for the teacher. Each mode of service delivery has advantages and disadvantages.

Advantages of the traditional role include the ability to set up suitable space and equipment for assessment and intervention without distraction. The individual needs of each child can be optimally catered for and clients usually go to the professional, which saves professional time (but may inconvenience or unsettle the client). Disadvantages appear to outweigh the advantages in an educational environment because removal from the group and its interaction may influence socialisation, motivation, sharing, and communication skills. Withdrawal may also foster concentration on one dimension rather than the whole child in a family and community. The teacher is frequently excluded, thus rendering even more difficult the fostering of a collaborative spirit. Problems of co-ordination are introduced, including co-ordination of professional input into the curriculum, as well as of communication between child and professionals, professionals and parents and among professionals. Individual intervention is also expensive in cost effectiveness terms if the assessment and intervention can be carried out in some form of service "delivery" to a group of children.

Consultancy may be directed to the client, to the parent, or to the teacher or other professional. Consultancy could be offered following a specific request when individual assessment and advice are offered, including special programs if necessary. Observation of groups or individual children could be requested and should produce advice on handling, curriculum design and so on. Consultants may also work in the unit on a regular basis feeding their professional expertise into many areas.

Several important advantages attend the consultant role. The teacher is centrally involved (which is preferable for the child), and has rapid and consistent access to specialist advice and support. The consultant approach usually permits a greater spread of expensive resources than "hands on" therapy.

Disadvantages of consultancy services include the need for time; consultants must be available to listen, to report, to attend case conferences and to travel. The need for counselling skills is stressed. A high level of co-ordination, communication and trust is required. It is essential that team members have compatible philosophies of child development. Conflicting information and philosophies may be disruptive for child, parents and other professionals. Many problems could be avoided by the use of a designated person as case co-ordinator. Dealing with a multiplicity of agencies compounds the problems. The responsibility for implementing the consultant input can impose additional loads on the teacher, and consequently it is important that all team members rationalise their procedures in order to minimise this burden.

Personnel need to be educated in order to function effectively and efficiently in teams while maintaining harmony and opportunities for individual professional growth. Experience in team functioning should take place during formal training, as well as within the operation of the team itself.

The resource role could have considerable potential in early educational intervention, and warrants further investigation. The teacher would deliver the service, functioning independently. Some of the skills of the various professions would be imparted to the teachers in pre-service, in-service and post-graduate training. Information would be freely available to the teachers, perhaps through a central information unit, which could possibly operate on a computerised retrieval system. The sharing of relevant literature and articles, as well as joint attendance at seminars, would also be necessary.

Several general issues emerged as vital to successful team work, including the importance of co-ordination and communication. Specific factors such as the need for counselling skills, the advantages of a designated person as case co-ordinator, and the benefit of writing intervention objectives and procedures clearly and concisely would also be required if team approaches to early educational intervention were to be effective.

Parents need consideration in team approaches to early educational intervention. They want to be treated as equal partners in the planning and decision making which will affect their child's and their own lives. The child and family must be viewed as a unit. The importance of information, including immediate and accurate feedback, has been stressed by all parents. Again, parents also require access to the records held by team members.

Recommendations:

- *Discussions should be held by agencies and professional associations to explore workable solutions to the problems impeding team functioning in the delivery of support services to the special preschools.*

- *Each discipline should review its traditional role definition in order to delineate where its professionals could offer consultancy services.*
- *Training institutions should explore ways of including multi, inter and transdisciplinary team experience in the training of students in guidance, educational psychology, medicine, the therapies, and social work.*
- *Issues of information exchange, team leadership, and case conferences should be explicitly considered by both policy makers and educators.*

6.4 Programs Beyond the Special Preschools

6.4.1 Integration. Identification of issues and forming of recommendations concerning the integration of disabled children in regular preschools, schools and continuing education services were prominent at a recent meeting of 140 parents of the disabled from throughout Queensland who attended Access '81.(1) These also reflected the views which had emerged from an earlier national meeting of women who had given birth to a disabled child (National Women's Advisory Council, 1980).

The parents drew attention to the fact that many disabled children in special education units within a regular school were not participating in the normal range of school activities. They recommended that every opportunity should be taken to include disabled children in regular classroom, library, recreational and playground activities. Reverse integration, the bringing of "normally" developing children into the special school environment, should in their view also be investigated and could easily be implemented in the special preschool settting.

In order for integration to be successful, fellow students and teachers must be better prepared than is currently the case. Teachers of regular classes, including preschool teachers, must have some exposure to special education and to exceptionality. The parents suggested that, apart from changes in teacher education, programs on the concept of integration of disabled students into the regular school and community should be undertaken, with fellow students as well as with teachers. The attitudes of other parents and of the community also vitally influence student and teacher perceptions. Although attitude change at a community level is difficult to achieve, changes may be effected by community awareness campaigns, such as those undertaken in conjunction with the International Year of Disabled Persons. The schools should, however, not rely on vicarious opportunities for change alone. Rather, they should be in the forefront of the movement by including human relations courses and by using appropriate materials on disabled people in the curricula.

---

(1) Access '81, a conference organized for parents by the Queensland Committee of Parents of the Disabled, was held at Union College, the University of Queensland, from 14-17 July, 1981.

The availability of adequate support services for disabled children and their parents, and for teachers who have handicapped children in their classes, was seen to be a major factor in the success or failure of integration. Parents particularly criticised the lack of therapists in educational settings, as well as the shortage of specialist and advisory teachers; parents do not want to have to travel to other units in order to obtain appropriate support services for their children. When available, such support has often developed, both philosophically and theoretically, within a medical model and the service is also frequently delivered in a medical framework rather than within an educational model. Regionalisation of all services was also preferred by the parents for many reasons, including the greater opportunity for integration which is provided through the use of regional and community services.

It is clear that integration programs cannot succeed unless adequate support is provided for the regular school teachers involved with the exceptional child, and that the progress of children's integration into regular settings must be monitored carefully. Physical integration can inadvertently lead to social isolation unless careful attention is paid to the sensitive implementation of this potentially beneficial educational initiative. As suggested, the special preschool advisor, working in conjunction with special preschool staff, can provide effective links between the regular setting and the special preschool.

Recommendations:

- *Integration of exceptional children into regular educational settings should be carefully monitored and regularly reviewed.*
- *There should be a link person, such as a special preschool advisor, to liaise with staff in the regular and special preschools.*
- *It should be ensured that the specialist support staff required by the child are available to delivery services in the regular setting, should this become the child's primary placement.*

6.4.2 The special preschools as clearinghouses. It is becoming clear that the special preschools could function as educational clearinghouses, providing a period of ongoing assessment, as well as early educational intervention, with a view to the development of a sound basis for placement decisions. The principle of flexibility of educational options is of great importance. But how flexible are the current options and how sound are the present bases for placement decisions? It is perhaps too early to answer these questions, as the group of children who have left the special preschools is relatively small in number. The next phase of monitoring the pilot programs should involve longitudinal follow-up of these children who have been in the special preschools.

A more disquieting issue is whether, having experienced a program involving agencies from a number of disciplines, the children will have access to such a range, if necessary, in their future placements. Continuity of services would seem to be essential. This implies the need for examination of the support services currently available throughout Queensland educational systems.

As suggested earlier, there is also a need for ensuring that information is efficiently transferred among the sectors of the educational system, to ensure that assessments carried out in the special preschools are used effectively to guide educational programming in the children's next placements. Again, the establishment of a structure to ensure this, some form of network, is required. Guidance personnel would seem ideally placed to facilitate the smooth transition from the special preschool to the next placement. They are also the obvious professionals to undertake the process of periodic review of the placement.

Recommendations:

- *There should be careful consideration of the links between the special preschools and other educational placements for children who have been in early educational intervention programs.*
- *Longitudinal follow-ups should be undertaken to evaluate the articulation of special preschools with other placement options, and to assess the efficacy of special preschools as early educational clearinghouses.*
- *The needs of children in later placements should be surveyed with a view to assessing the adequacy of support services.*

- *Guidance officers should be involved in overseeing the transition of children from special preschools to their next placement and in undertaking the process of periodic review of the placement.*

- *Better networks of communication among the various sectors of education in Queensland accepting children from special preschools may have to be established.*

6.5 General Directions for the Future Development of Early Educational Intervention Programs

6.5.1 Coordination

The common thread running through the preceding discussion has been the importance of establishing networks for the exchange of information and the delivery of services to children attending special preschools.

The process of network establishment begins with the development of initial awareness of the existence of the special preschool service and the communication of its role and functions, both to the potential client group and to the professionals who may refer children to them. The next level of network development involves systematic identification of the potential clientele and their needs, as well as the availability of support services. Explicit mechanisms for contact then have to be established among the preschools, the support services and the clientele.

The establishment of the network involves formulation of policies both within and between agencies. As already suggested, there is a need for inter-Divisional consultation. For the Department of Education this would involve the Divisions of Preschool Education, Special Education and Primary Education. For the Department of Health the list should include the Division of School Health Services, Intellectual Handicap Services and Community Health Services. In addition, mechanisms for involving the Department of Children's Services and the various independent agencies in the network are necessary.

The establishment of the Interdepartmental Standing Committee on Early Intervention is a tangible step towards the development of the mechanisms for effective coordination of services. The committee consists of senior representatives of the Departments of Children's Services, Education and Health. One of the initiatives of the committee has been to establish regional or "core" committees to explore, among other things, regional needs and the availability and coordination of services to meet these needs. The regional committees have the following charter:

Whereas the Interdepartmental Standing Committee on Early Intervention has a State-wide mandate, Regional Core Committees are responsible for the effective coordination of services to young children and their families in a region. As regional management groups they are comprised of the senior officers of each Department in the region and would meet as necessary, but at least twice a year. It is understood that case discussions would regularly occur between field personnel, quite apart from the Regional Core Committees. Members of Core Committees retain administrative responsibility to their respective Departments.

The terms of reference for the regional committees are :

1. To ensure that the most appropriate available services are provided to all children and families who need them.

2. To disseminate information on agency functions so that parents and professionals in the region know where to seek help and whom to contact.

3. To establish mechanisms for easy referral and systematic follow-up of cases.

4. To coordinate the operation of early intervention services to children with special needs in the region.

5. To rationalise the provision of services at a local level in order to avoid duplication.

6. To identify unmet needs and record community concerns.

7. To jointly plan the decentralization and development of early intervention services in the region.

8. To provide and maintain an up-to-date Community Resources File.

9. To liaise with non-State government organizations providing services and to monitor such provision.

10. To report annually to the Statewide Interdepartmental Standing Committee on Early Intervention and include a summary of the Community Resources File.

11. To make recommendations through respective Departments on action considered necessary.

Already there has been some rationalisation of services in Brisbane, involving the division of the clientele by age, with the Central Assessment Clinic tending to provide services for the children under three years of age. Divisions of labour of this kind are an important development, especially when all agencies can cooperate to ensure that the degree of involvement of each agency is maintained at a level that is appropriate to the children's needs. The balance of involvement of each agency should change as the pattern of needs change. While health-related professionals may take the primary role in the early years, it is still important that educational, guidance, and social work personnel also are involved. Similarly, at later ages education may take the predominant role, but with other professionals clearly involved in the provision of appropriate support services.

Recommendations:

- *Explicit policies should be developed to facilitate coordination of early intervention services both within agencies and among agencies, at local, regional and state levels.*
- *The development and functioning of the regional "core" committees should be monitored with a view to identifying those factors which contribute to successful coordination, and those which impede progress, at a regional level.*

6.5.2 Beyond the first pilot phase

The pilot early educational intervention programs represent an important educational initiative by the Queensland Department of Education. They have provided an opportunity to develop a new service delivery system, at first, on a small scale. The monitoring project has independently documented the process of evolution, identifying both the strengths and limitations of the service.

The picture of early educational intervention presented in this report is one of a service developing in a state capital city, with the full range of specialist professionals potentially available, if at times in insufficient numbers. While the pilot project provides guidelines for the development of services throughout Queensland, there is a real danger in hasty extrapolations from the four pilot programs in Brisbane to the situations that may be encountered in other parts of the state. We would argue strongly for a second pilot phase which examines development of special preschool services in provincial and rural centres.

Regional committees on early intervention have been established in the following cities: Cairns, Mackay, Maryborough, Mt. Isa, Toowoomba and Townsville. These committees are in a position to establish pilot special preschools, again on a limited scale, and to monitor their development, in the light of the needs and the resources available, in each area. The form of early educational intervention program that evolves in each area should reflect these patterns of needs and resources. It is not possible to prescribe the composition of the team, but a minimum set would include some combination of teachers, aides, guidance officers, school medical officers or another health professional, social worker, and therapists.

The viability of early educational intervention in other areas must be assessed before the service is extended throughout Queensland. Our involvement with the four pilot programs has made us aware of the considerable community pressure for a general extension of early educational intervention programs. On balance, we feel that this would be premature. The mechanisms for coordination of support services must be shown to be functional before the service is generally extended. Teachers cannot be expected to provide early educational intervention without access to an appropriate support service network, geared to the needs of the clientele of the special preschools. Regional committees need time to explore the possibilities for providing such support services. It would seem judicious to establish a pilot special preschool in each region and use it as the nucleus for the establishment of the early intervention service delivery mentioned. The program evolution should be monitored for at least one, or preferably two, years.

The regional pilot programs would also provide a focus, in each region, for discussions of the nature of early educational intervention by the professional service delivery community. Early intervention is a term which summarizes a range of models of service delivery to young handicapped children. Some consensus on the nature and scope of early intervention must be reached before coordination of services can be achieved. It would be expected that a healthy diversity of models, tailored to the needs of regions, would evolve.

Recommendations:

- *The Standing Committee on Early Intervertion should be responsible for the further monitoring of the development of special preschool programs.*
- *A second pilot phase should be undertaken, on a limited scale, in a selection of provincial centres, before a decision is taken to establish further special preschools throughout the state.*
- *Following the second pilot phase, the wider establishment of special preschools should await the recommendation of the regional committees following a thorough survey of local needs and resources.*

References

Anastasiow, N. Strategies and models for early intervention: programs in integrated settings. In M. Guralnick (Ed.), *Early intervention and the integration of handicapped and non-handicapped children.* Baltimore: University Park Press, 1978.

Ashby, G., Cliffe, S., Culbert, N., & Miller, S. *Information statement on Early Educational Intervention.* Brisbane: Queensland Department of Education, 1979.

Burns, Y. R., & Watter, P. Identification and developmental assessment of children with neurological impairment. *Australian Journal of Physiotherapy*, 1974, *20*, 5-14.

Clark, D. L., Chee, F. K. W., Kantner, R. M., & Kreutzberg, J. R. *Evaluation of motor skills in the preambulatory child.* The Ohio State University, Department of Anatomy, 1976.

National Women's Advisory Council. *Report on a conference for mothers of disabled children.* Brisbane, 1980.

Queensland Committee of Parents of the Disabled. *Access '81.* Brisbane, 1981.

Rutter, M., Tizzard, J., & Whitmore, K. *Education, health and behaviour.* London: Longmans, 1970.

Steinberg, M. A. *A multidisciplinary investigation of minimal brain dysfunction.* Unpublished thesis. University of Queensland, 1978.

Steinberg, M. A., & Rendle-Short, J. *A longitudinal study of young children concerning sensory-motor functioning and educational achievement. Part 1. Sensory-motor functioning in pre-school children.* Report to the Education Research and Development Committee, Canberra, 1979, 1-150.

Watter, P., & Bullock, M. I. *Physiotherapy management of young children with minimal cerebral dysfunction.* University of Queensland, Department of Physiotherapy Research Report, 1977, 2/77, 1-40.